Focus group discussions.

Focus-group-discussions (FGD) were held with two groups each of mothers, community health workers (CHWs), and female health workers (FHWs) per province. However, it was not possible to conduct the discussions in Balochistan with CHWs, due to cultural constraints. Four to six individuals participated in the discussions. All these groups were arranged and conducted at the BHUs. They provided the groups with a room so the discussions could take place without outside interference.

The information gathered from the BHU caretakers, the local practitioners, key-informants and the focus groups serves to underline and deepen the findings of the cluster survey of mothers and fathers.

When the data was analyzed on the local practitioners, it was not clear if the findings would be consistent with true treatment practices. Therefore, a small observational study was conducted to validate the findings on these providers "reported" practices. Two team members dressed as Afghan women with a weaning-aged child having a "mock" case of simple/non-dysentery diarrhoea paid a visit to 28 practitioners located close to refugee villages in Peshawar.

Questionnaires.

All the questionnaires were developed by a CDD KAP consultant with support of the survey managers, and survey teams in both provinces. These questionnaires are given in annexes I to VII.

Data collection.

The survey was conducted by MSF Holland-Peshawar and MSF Holland-Quetta. Each survey team consists of four Pakistani women with previous experience in conducting surveys among Afghan refugees. The survey workers were briefed on the purpose of this survey and were given a refresher training on diarrhoea as well as on the use of the questionnaires.

Both teams received specialized training for the study by anthropologist, Ms. Abida Aziz of PRITECH. They were given refresher training on survey techniques plus new skills on in-depth interviewing and how to lead focus groups discussions.

Methods of analysis.

All of the survey data were analyzed with the help of the software programmes EPI-INFO5 and Harvard Graphics. The analysis of the mothers and fathers cluster survey was done jointly by the survey manager and consultant, while the other parts of the diarrhoea study were done by the consultant alone.

4. RESULTS.

The camps that were visited are listed in annex VIII. Annexes I to VII consist of all the questionnaires used in this study, some of which show the frequencies. This chapter only highlights the main points. Results are given for both provinces together, unless there were significant differences.

Sample population.

436 mothers who had a child under 5 with diarrhoea in the last 2 weeks, 430 fathers with a child under 5, and 60 BHU caretakers of active diarrhoea cases under 5 were interviewed. Furthermore, 16 grandmothers/dais, 10 focus groups and 60 local practitioners were questioned, and another 28 local practitioners were observed.

The children of the interviewed mothers had the following age distributions: 35% < 12 months
35% 12 - 24 months
30% 2 - 5 years.

73% of the interviewed fathers were employed. 79 % were between 20 and 49 years of age.

The majority of the fathers and mothers belonged to the Pashtun ethnic group.

The provinces of origin were mainly Kandahar and Helmand for refugees in Balochistan and Nangarhar, Paktia, Kabul and Kunar for refugees in NWFP.

4.1. Targets of CDD training.

Who do women learn from ?

Mothers on survey were asked what their first action was in the home management of their child's last episode of diarrhoea and from whom they learned this. Outside of answers like "learned this from no one/unknown" (32%), the most common learning source was a female relative (41%), of which the majority were mother-in-laws. Health workers play a lesser role, with 18% being the stated source of knowledge on home treatments. Another survey conducted in two Hangu camps revealed that mothers prefer a "literate" female health worker to be their preferred source of information when learning new CDD information.[Phase #2 Wheat ORT Project]. Focus groups done earlier as a part of that project hinted at the changed role of the mother-in-law. Mothers stated that "they (the mother-in-law) do not always have reliable information"[Phase #1 Wheat ORT Project].

Mothers source of advise.

Mothers were asked to whom they turn when they do not know what to do in diarrhoea case management. Taking both provinces together, the mother-in-law was frequently mentioned. In NWFP however, the most common answer was their husband (48%). This likely reflects the male being seen as the source of outside information and a reduced reliance on the traditional role of older females. Female relatives accounted for only 29% of answers in NWFP. "Nobody" was also frequently mentioned in both provinces (17%).

Who assists the mother in home management ?

According to mothers, older female relatives (47%) assist in taking care of the child at home, this being the child's grandmother or aunt. The next most common response was the child's older sister (32%). Of interest, 32% of the surveyed fathers stated that they will administer home treatments themselves. Again as with decision making, we see the family unit functioning cooperatively.

Who takes the child to the BHU ?

The majority of the interviewed fathers (71%) saw this as their role, while 13% said this was their wife's role. Of the diarrhoea cases interviewed in the BHUs, 75% of the caretakers were the child's mother. These results are biased as the survey teams conducted their BHU interviews on "female health days" in NWFP and teams in Balochistan were reluctant to interview men. A larger BHU survey would need to be conducted to determine who the most common BHU caretaker is in order to tailor BHU educational materials.

Who decides that the child must be taken to the BHU ?

Fathers felt that this was either their or their wives decision (43% and 44% respectively). It is interesting to note the difference between the 2 provinces. In Balochistan 69% said that it is their wife's decision, while in NWFP, 62% of the fathers mentioned it was their own decision.

On the other hand, mothers bringing their child to the BHU for treatment of diarrhoea felt that this referral was their own decision (in both provinces).

In-depth studies in medical decision making conducted in Chitral by medical anthropologist, Isabel Hemming, reveals a more complex process. The mother initially decides outside help is needed, the husband gives permission, and the mother-in-law must approve.

Who recommends drug therapy and what is the source ?

Prior to BHU consultation, 64% of the children had been given some sort of medication. 36% of these used medicines on the advise of a health worker and 48% obtained them from a physician's office. 17% had used left-over medication kept in their homes and only 33% were purchased directly from a medicine store.

Literacy in the household.

Of the households visited during the mothers survey, 60% of the mothers reported that at least one family member was literate. Of these, 72% were adult males and 23% were male children. However, these figures should be taken with care, because the degree of literacy was not accurately assessed.

Opinions about training targets and training methods from focus group discussions.

From the focus group discussions, the following opinions about CDD training targets and methods emerged. Four family members should be included. The mother is still the primary target to reach. The grandmothers should be included because her advise is accepted by all. Fathers are important because they are the purchasers and women are obligated to follow their instructions. The elder female siblings should be included as they are assistant caretakers. CHWs felt that fathers did not teach their wives about new things they have learned about diarrhoea.

Mullahs are not appropriate vehicles for ORS information dissemination.

Posters and radios are acceptable, though access to the latter are not universal. Radios were mentioned as a source of information more commonly in Balochistan.

From the fathers survey it became clear that the role of the Community Health Workers (CHW) is rather limited regarding information about diarrhoea. Only 42% of the fathers had received information from a CHW (in Balochistan 41%, in NWFP 31%). Furthermore not many learn how to prepare ORT from a CHW (17% ORS in NWFP and 33% SSS in Balochistan) Finally only 4% felt it was their responsibility to teach their wives new things they have learned about diarrhoea from a CHW. (These percentages were calculated for camps which have a CHW programme).

4.2. Traditional beliefs.

Diarrhoea terminology.

Local names for diarrhoea which were mentioned in NWFP can be summarized in 4 broad categories:

Nasa or nasnasti (28%)
Dastoona (26%)
Paich (21%)
Ishal (9%) mainly mentioned by Tajiks

Other names for diarrhoea mentioned include a large variety, among them: amal, kuinda banda (Nuristani) and naskhuga (Pashai).

Questions in Balochistan did not reveal the same categories as the question was interpreted differently by the team. Answers there were:

Green diarrhoea or "zerghoona amalloona" (26%)
Simple diarrhoea or "sadda amalloona" (26%)
Watery diarrhoea or "oobowallah amalloona" (13%)
Yellow diarrhoea or "jer amalloona" (12%)

Diarrhoea classifications.

The in-depth interviews with grandmothers revealed a number of diarrhoea categories, classified either by cause or by stool characteristics. There was no agreement on traditional treatment or on their inherent nature, i.e. hot/cold, although their classification may not necessarily mitigate against certain kinds of treatments.

Diarrhoea is classified by either:

- Stool character: watery, green, yellow, bloody, mucous
- Cause : teething, measles, weather (hot or cold exposure), supernatural (fear or jinns), food (hard, unclean, or amount related).

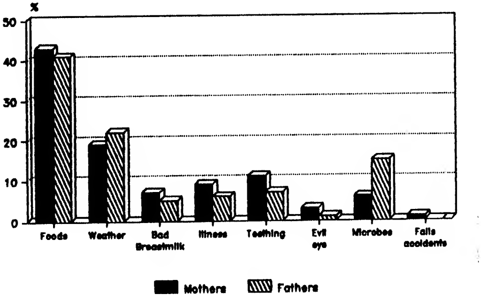
Believed causes of diarrhoea.

General causes.

Both mothers and fathers were asked about their general beliefs as to the causes of childhood diarrhoea (figure 1). There was a high degree of consistency in answers between the two groups, reflecting a greater than expected involvement of fathers in home health care matters.

The most common perceived cause of diarrhoea is related to "food" (43% of the mothers, 41% of the fathers). The second most frequently mentioned cause of childhood disease is related to "weather". Weather related causes included exposure to hot sun, cold weather, sitting on wet surfaces, or bathing. Furthermore mothers mentioned "teething" quite often (11%), while fathers referred to "microbes" (15%) as a cause.

Figure 1. General causes of diarrhoea (in %)



Source: Mothers/Fathers Survey

Fathers tend to favor the germ-theory based beliefs (hygienic, water and vector borne) while mothers' concepts are more traditionally based (spiritual). The prevalence of "bad breast milk" as believed cause of diarrhoea is of concern.

Actual causes.

The survey teams asked mothers and relatives of an active diarrhoea case the believed cause. "Food" again was the most commonly perceived aetiology, followed by "weather". Alarmingly however, "bad breast milk" is frequently mentioned being a cause of diarrhoea.

Folk physiology.

In-depth interviews with grandmothers provided some insights into how the believed etiologic agents cause the child's diarrhoea.

* **Foods** that are contaminated, raw, consumed in the wrong combination, or too hot/cold generally disturb the stomach, which in turn propels the contents out. These foods can displace the intestines as well, although treatment is not focused on any "realignment " maneuvers.

* **Hard foods** cause diarrhoea mechanically by scraping the intestinal lining (frequently resulting in blood), and by simply stimulating diarrhoea due to the indigestibility of the food.

* **Hot/cold temperature exposures or foods** will cause the intestines to cramp resulting in diarrhoea. Temperature extremes also will "heat or chill" the heart which in response stimulates diarrhoea. Exposure to heat or to hot foods consumed during the summer are believed to directly spoil the food contents of the stomach causing a disturbance and diarrhoea.

* **Fear** directly disturbs the stomach, or is seen as a heart irritant which stimulates diarrhoea.

* **Measles** diarrhoea is a result of "boils on the inside of the stomach". Another perceived mechanism of measles diarrhoea comes from the "heat of the fever", which behaves the same as over-exposure to heat.

* **Bad breast milk.** Breast milk can become spoiled due to the diet of the mother, or it can curdle if she becomes overheated, causing diarrhoea in the breast fed child. The milk of a pregnant woman will cause an allergic-like response in the form of diarrhoea because this milk is believed to bad for anyone other than the fetus. Furthermore, breast feeding another child will weaken the fetus.

* **Teething** causes diarrhoea because the pain associated to teething acts as an intestinal irritant. Also it is believed that during teething a child is weak, and thus is less resistant to diarrhoea.

Recognized serious sequela of diarrhoea.

Discussions were held with key-informant grandmothers as to "what happens to a child with diarrhoea?". Two major categories of serious effects of diarrhoea emerged: behavioral (weakness, will not walk, crying, decreases appetite) and dehydration (sunken eyes, dryness, thirst, dry tongue).

Specific diarrhoeal symptoms were discussed to get better insights into Afghan folk physiology.

Weakness: is seen as the product of inadequate food intake and a result of dehydration itself.

Dryness: is reported to be a result of water losses from stools. One woman described the analogy of a deflated balloon.

Appetite loss: outside of being a product of generalized illness itself, the loss of appetite is related to a "weak heart", loss of taste, abdominal pain, and weakness.

Vomiting: During diarrhoea, the stomach cannot digest food, and likewise this causes vomiting. Chest pain and abdominal pain seen in diarrhoea are also the perceived causes of vomiting.

Fever: The lack of water in diarrhoea is seen as the source of fever by most of the respondents.

Blood: The most interesting responses came when asked about the cause of blood in diarrhoea. With excessive diarrhoea and fluid losses, it is felt that the intestines dry out, crack, and bleed similar to skin. Blood in the stools can also be a result of cramps and or excessive pressure on the intestines during diarrhoea. Hard foods can scrape the intestines producing blood, or generalized "weakness of the intestines" during diarrhoea will cause bleeding.

Death: When questioned about why a child sometimes dies from diarrhoea, the majority of grandmothers felt that this event is a product of the "Will of God". Lack of treatment and water loss were also commonly mentioned.

Initiation of treatment at home.

Figure 2 shows the first thing mothers do at home for their child's last case of diarrhoea (2 week recall) for the two provinces.

There is also no consensus on the hot or cold classifications of foods. The principals of hot and cold diarrhoeas do not appear to be humorally based, but related to over-exposure to extreme weather conditions. Weather related diarrhoeas are often treated with a hot or cold substance to counteract the weather-exposure.

The rationale for most traditional treatments is to "stop diarrhoea". Other reasons given are related to "cleansing the stomach" or washing out the offending substances. Only measles and teething were treated with any consistent rationale. The treatment objective of both is not aimed to stop the diarrhoea. Teething diarrhoea is treated with substances aimed to stimulate the gums and accelerate the teething process or with calcium prescribed by doctors.

Diarrhoea related to measles is seen as therapeutic It is a process in which the measles is purged from the body. Therefore people are less inclined to treat it with drugs. It is believed that a child who does not have diarrhoea with measles can easily die.

Referral cues.

Both fathers and the caretakers of active diarrhoea cases brought to the BHU for treatment were asked about the symptoms that generated referrals. This question was dropped from the mothers survey as the question was found to be too complex and time consuming.

The criteria for deciding diarrhoea is serious in the opinion of fathers were primarily for weakness (21%) and stool frequency (23%).

Although caretakers did not mention weakness frequently, stool frequency was also the number one reason for referral (26%), followed by fever (22%), and behavioral changes and vomiting (19% both).

The mean number of stools that motivate outside referrals for fathers are 10 (range 2-80) and for active BHU cases was 7 (range 3-20).

No specific term exists for dehydration outside of "dryness". This term per se was the third most common reason for referral among fathers (11%) although another 7% reported referral symptoms that they did not recognize as signs of dehydration.

4.3. Fluids.

Reasons for not increasing fluids.

Fluids were increased by 65% of surveyed mothers when treating their child's last case of diarrhoea. Only 17% decrease the amount and 1% stopped fluids altogether. All key informant grandmothers felt that fluids are important and 95% of BHU cases had been on some sort of fluid therapy prior to reporting to the unit.

Of those surveyed mothers who did not increase fluids, the reasons given were not the same in both provinces. The most important reason in NWFP was first "the child refused or was not thirsty" (51%), and then that "fluids increase diarrhoea" (28%). In Balochistan the concept of fluids increasing diarrhoea was more important (51%) than the child refusing (31%).

These same reasons (child refusing and increased diarrhoea) accounted for fluids being withheld among the active BHU cases. One mother did not give fluids because she was under the impression that only ORS should be given.

Lack of concern for the child, ignorance, and too little maternal time due to high parity were among the explanations given by the grandmother key-informants as reasons that fluids are not increased during diarrhoea.

Home fluids.

Outside of herbs (seen as a specific treatment), the most common fluid offered to a child with diarrhoea is boiled water, ORS (14%), SSS (28%) and tea among BHU-users. Both the caretakers of an active diarrhoea case and key informants were questioned about the reasons a particular home fluid was used, in order to gain insights as to its perceived therapeutic action.

Water: Outside of rehydration, or thirst quenching, water is given for its life support qualities. It is also given for its cooling properties, and ability to "freshen" the body or "freshen the liver". Most feel water is humorally cold or neutral.

Tea: There were mixed responses to whether green tea is considered a hot or cold substance, but all agreed that black tea is hot. Outside of rehydration, tea is given for hunger, to strengthen the child, out of habit, or to pacify an irritable child. Milk tea, considered "hot" is used for its ability to warm the intestines.

Milk: is used as a food, to promote growth and strength, and to ease hunger.

Herbal teas: are given primarily to "stop diarrhoea".

Other fluids: Other fluids mentioned by key informants were all humorally cold: soups for strength; yogurt to cool the heart; apple juice for energy; and cane water which is a specific treatment for yellow diarrhoea

Rice water: was mentioned as a home treatment by 4% of fathers. On specific questions regarding use of rice water, 26% of the mothers said that they had used it at sometime as a diarrhoea treatment. It was not mentioned as a home fluid by grandmother key informants nor as a fluid given prior to BHU visit by active case caretakers. Therefore, rice water as a active practice may be lower than its reported historical use.

Amounts of fluids given/feeding

Mothers were asked how much fluid they offer at a time. 17% are giving only teaspoon-full amounts, 42% at least 1/2 a cup, 35% one cup or more and only 6% of the mothers reported they give the amounts in feeding bottle units (1/2 or 1/4 of a bottle). The amount given was directly related to age: fluids given by teaspoon amounts are to under ones.

CONTENTS.

SUMMARY 2

1. INTRODUCTION 6

2. OBJECTIVES OF THE STUDY 8

3. METHODOLOGY 9

4. RESULTS 11

- 4.1. TARGETS OF CDD TRAINING
- 4.2. TRADITIONAL BELIEFS 13
- 4.3. FLUIDS 18
- 4.4. FOODS 20
- 4.5. ORS/SSS 21
- 4.6. ROLE OF FATHERS 26
- 4.7. CONCEPTS OF PREVENTION OF DIARRHOEA 27
- 4.8. LOCAL PRACTITIONERS CONSULTED BY THE REFUGEE POPULATION 28

5. RECOMMENDATIONS 34 36

REFERENCES 38

ANNEXES 39

- I Questionnaire for Mothers
- II Questionnaire for Fathers
- III Questionnaire for BHU Care-Takers
- IV Questionnaire for Local Practitioners
- V Questionnaire for Key-Informants
- VI Guide for Focus-Group-Discussions
- VII Local Practitioner Practices
- VIII List of selected camps

Feeding frequency of fluids

Fluids are most commonly given on demand (53%) or routinely 3 times a day during family meals (21%). 14% will give fluids hourly or less so, and only 1% after each loose stool.

Fluid taboos.

There are few fluids that are avoided, the most commonly stated was black tea. Unboiled water was mentioned by 24% of the mothers. Milk was mentioned 20%, and breast milk by 3%. Reasons for these taboos were non-specific in terms of increasing diarrhoea or causing vomiting.

4.4. Foods.

Reasons for stopping or decreasing food intake.

62% of surveyed mothers stated that they either stop feeding their child during diarrhoea (8%) or give diminished amounts (54%), while 21% do not change the amount and only 16% give more.

Reasons given for either stopping or reducing the amount given were for NWFP "child refuses food/poor appetite" (66%) and 23 % believed food increases diarrhoea. For Balochistan the reasons can be summarized as "food increases diarrhoea" (42%), "child not hungry/refuses food" (37%) and "food not digested during diarrhoea" (12%).

Foods commonly used during diarrhoea.

The most common foods given during diarrhoea are:

soft rice (shola)
nan
bananas
yogurt

In-depth interviews with key-informant grandmothers and BHU cases validated these findings.

Therapeutic value of foods given

There was no agreement among the key informants as to the hot or cold nature of these foods. A more important attribute of therapeutic foods to be given during diarrhoea is its quality, softness and digestibility, and perceived nutritional value. Most foods are given for strength and/or to "relieve hunger". The third most common response for giving a particular food among the BHU case caretakers was "it stops diarrhoea".

Feeding frequency during diarrhoea

During diarrhoea, food is usually offered 3 times a day (54%), consistent with family meal times. Only 15% of mothers stated they try to feed their child more often than this.

Food taboos.

In general, foods withheld during diarrhoea are:

meat (67%)
oil/ghee (57%)
hard vegetables (41%)
potatoes (36%).

Reasons to avoid these foods again are not related to their hot or cold properties, but rather because they are hard and indigestible. Oil is seen as a "slippery substance" and as such increases diarrhoea, while hard meats can create undue "pressure" in the stomach or scrape it causing bloody stools. Some foods such as daal and cauliflower are to be avoided by the breast feeding mother as it is believed that they produce gas in the child. Hard fruits are generally avoided due to their indigestible nature, while spinach and eggplant are not recommended as their "iron" content is presumed to act as an irritant.

4.5. ORS/SSS.

Use and names for names for ORS/SSS.

The questions in NWFP focused on ORS, in Balochistan on SSS, because in Balochistan ORS is only used in the BHU.

ORS: 93% of surveyed fathers in NWFP had heard of ORS and 92% of the mothers in NWFP stated they have used it sometime in the past. The most common name used for ORS among both mothers and fathers are "Nimkol" (46%, 48%), and "Purai" (37%, 28%).

SSS: 73% of surveyed fathers in Balochistan had heard of SSS and 64% of the mothers in Balochistan stated they have used it sometime in the past. The most common names used for SSS among both mothers and fathers are "Sugar/salt water"(26%, 47%) and "Nimkol" (17%, 11%).

Perceived action.

When asked about the benefits of ORS/SSS, both mothers and fathers mentioned either "stops diarrhoea" (35%, 32%) or "stops dryness/replaces lost water" (27%, 27%). Another commonly held belief by both groups is that ORS or SSS "stops weakness" (12%, 15%). Almost twice as many mothers (5%) felt that ORS/SSS had no effect than fathers (3%), due to the mothers' more direct experience. A more traditional interpretation of ORS/SSS effect is that it cools the body.

Focus group discussions with mothers revealed another concept. ORS is believed by some to purify and activate the blood, and fills the veins with water. It was also mentioned that it has no effect unless given with drugs, probably reflecting the physician's prescribing habits.

Nature of ORS/SSS.

The majority of surveyed mothers felt that ORS/SSS was a cold substance (67%). 85% felt that it can be used in all types of diarrhoea. Of those feeling it cannot be used in all diarrhoeas, the most common reason was that doctors advise it for only certain types of diarrhoea. Other responses related to stool color, i.e. it is not to be used in green, yellow, or bloody diarrhoeas.

Mothers in the focus group described why ORS/SSS may not be given with bloody dysentery because the salt will irritate the intestinal wounds (bleeding sites). Some felt that it is indicated only with significant fluid losses from watery diarrhoea or diarrhoea with vomiting.

20% of surveyed mothers did not know if ORS was hot or cold and another 9% claimed it was a neutral substance. On in-depth discussions with grandmothers and focus groups with mothers there was no consensus. One interpretation put forward was that sugar is cold and salt is hot, but the packaged ORS is cold.

Problems with ORS/SSS.

Few problems with ORS/SSS emerged through direct questioning in the mothers survey. Of the 13% stating that they had some complaint, the most common problem was taste (73%).

The focus group discussions with community health workers were more revealing as to the problems with ORS/SSS, especially with the male workers (CHWs). Upon being asked what they hear regarding problems, their discussion focused on its inability to stop diarrhoea. As the primary concern of mothers is to stop the child's diarrhoea, they felt that most consumers found ORS/SSS "useless". Its "costlessness" or lack of worth is related to it being seen only as water with just salt and sugar. Mothers seeing that it does not stop diarrhoea will not use it again, rather they will proceed to a private physician for drugs. The CHW's were quite concerned about peoples belief in injections, syrups, and tablets and the dangers of "keeping the germs inside".

Female health workers said that their families believe a child will die if medicines are not given from the bazaar. The value of medicines is reflected in the comment, "if medicine is not necessary, then why are there many hospitals"?

Taste as a barrier to compliance was also a focus of discussion with mothers and health workers. ORS/SSS is described as "sour" or too "salty". Older children simply refuse to drink it and younger ones must be "forced". Multiple techniques were described on how to trick a child to take ORS. Mothers will tell the child that it is only water or she will place a spoonful of powder in the mouth and say it is sugar, then follow this by a glass of water. Some mothers sprinkle the powder "sugar" on a piece of nan as a way to get it down the throat of a child. Although mothers are not reluctant to force feed ORS/SSS as they would with any medicine, the time involved when frequent and copious amounts are recommended is quite time consuming, especially when she does not see the stool frequency diminishing and must constantly be cleaning the child.

Opinions about cost and availability were mixed. Although most felt it could always be found in the bazaar, not all agreed that it was cheap. Some commented within the groups to each other that the cost is worth it, considering the amounts spent on more expensive drugs. Most believe it is not available in Afghanistan, as it was not well known before the war.

Amounts of ORS/SSS given during diarrhoea.

The amounts of ORS/SSS given at a time does not vary greatly from that of home fluids. 23% give teaspoon amounts, 41% give at least 1/2 cup, 30% one or more cups and 6 % gives the solution by bottles. Yet the frequency of feeding intervals is increased when ORS/SSS is used. Only 2% are being offered ORS/SSS after each loose motion, 35 % gives it 3 times a day and 25% gives it every hour or less.

The focus groups were asked to discuss the effectiveness of the message "one extra cup of fluid after each loose motion". The female workers felt that a mother is well aware of each loose motion, especially if the child is not independently mobile, and that mothers will accept whatever instructions the FHW will give them. Yet further discussions highlighted the problem of maternal time, especially when the child refuses the solution. The mothers' groups felt that this time expenditure was important and a priority easy to make.

Storage of ORS/SSS.

93% of mothers said they keep ORS/SSS covered after preparation and the majority (64%) throw it out within 12 hours. 25% will keep it up to 24 hours and only 10% beyond this. Focus groups talked about the solution turning cloudy after 12 hours as it "becomes out of order" due to microbes. This problem seems to be a major reason that only part of the package is used at a time. 40% of mothers will use ORS/SSS until the diarrhoea stops, or at least for 3 days (41%).

Means to promote ORS/SSS.

The focus groups were given ORS promotion as a topic for discussion, that included targets, messages, and vehicles for information transmission.

All groups felt that mullahs are inappropriate persons to disseminate information for the following reasons: "Mullahs only give tawizes", "Mullahs only talk with men" and "Mullahs cannot inform the whole village".

Radios were felt to be a good media, BBC being specifically mentioned, yet not every household has one. Posters were also felt to be acceptable.

There was much discussion on who should be the targets of training, for various reasons. There was not agreement on fathers. CHWs feel that men do not teach their wives, but their advise is always acted upon due to "fear" of the consequences of acting otherwise. The FHWs felt that it was not a "mans business". Other FHWs countered this sentiment, that since a man is in charge of purchasing for the household, he must understand the importance of ORS.

All agreed that the mother is the primary target, while maintaining the role of the mother-in-law, as "her advise is accepted by all". Elder siblings were also mentioned in the context of their assistant caretaker roles.

A number of explanations for dehydration came out of the in-depth key informant interviews and from the focus groups, reflecting NGO CDD training:

* a child loses water like a pitcher with a hole in the bottom
* a dehydrated child is like a deflated balloon.
* A dehydrated child is like a wilted plant that has not received enough water.

The CHW focus groups felt that ORS/SSS should be promoted by its ability to push out the germs.

ORS/SSS mixing.

Containers to measure 1 liter

The focus groups considered the problem of water measurement as a topic. They uniformly agreed that there was no consistently sized glass or cups in every household. Through the Wheat ORT study, a teapot measuring exactly one liter was found in numerous households. The mothers survey found this container present in 59% of households (NWFP: 67%, Balochistan: 51%). But all of the focus groups felt that marking a container in each household would be the most reliable and effective method to insure one liter. The groups documented the fact that no commodity (such as oil, milk, or lassi) is sold by the liter.

From the mothers and fathers survey it became clear that there is a tremendous variation in the containers used to measure one liter. Teapots had the least variation (regarding the contents of it) and the least number of errors when evaluating if the recited recipes were correct. The odds of a correct recipe were 3.56 time higher when using a teapot for the water measure as opposed to glasses (confidence interval: 1.67-6.69), regardless of whether it was prepared by mothers or fathers (results are not confounded when stratified by mothers and fathers groups).

Amount of powder used

The majority of mothers and fathers used a complete package to make ORS, while close to a quarter will try to conserve by using only part of the package. A minority will make ORS by the glass using teaspoons of the powder. There was no significant difference between the two groups in this practice.

Solution Concentration (Tonicity)

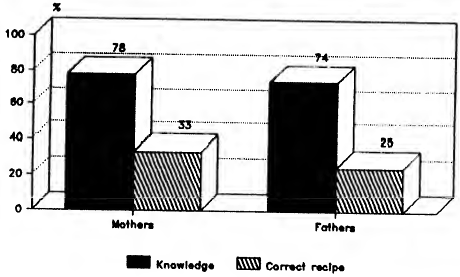
During the mothers and fathers survey, the respondent was asked to show the kind of container with which ORS is made, and the latter was measured and recorded. Then the respondent was asked the number of containers used and the amount of ORS powder or sugar/salt to be added. From the planned amount of powder (or salt/sugar) to be used, the ideal water amounts were calculated versus the amounts that would have been used. In this way the kind of errors were determined. Those respondents who make only a glass full of ORT were excluded from the analysis.

The errors for ORS are described as hypertonic or hypertonic. A hypertonic solution (over-concentrated) will draw fluid out of the intestines resulting in "osmotic" diarrhoea, thus increases diarrhoea. A hypotonic solution (under-concentrated) will be less effective in rehydrating a child and correcting electrolyte imbalances.

Of all the mothers interviewed, 33% of the mothers recited the correct recipe. The correct recipe is one ORS packet to 950 to 1200 ml of water, and for SSS, one scoop and one pinch to 500 cc of water.

74% of fathers said that they knew how to make ORS/SSS. Of these, 62% said that they had learned this from a doctor and 22% from a Community Health Worker. 25% of this group recited the correct recipe (figure 3).

Figure 3. Knowledge of mixing ORS/SSS versus correct recipe (in %)



Source: Mothers/Fathers survey

* The odds of a father making ORS correctly are 2.61 times higher if he was trained by a CHW than by a doctor (confidence intervals 0.85-9.24) in NWFP.

* The odds of a father making SSS correctly are 3.76 times higher if he was trained by a CHW than by a doctor (confidence intervals 1.31-11.14) in Balochistan.

SSS Errors (Balochistan)

SUGAR		mothers (n=127) %	fathers (n=111) %	Total (n=238) %
Too much	(>5% concentration)	46	57	53
Dangerous	(>50% concentration)	41	33	35
Too little		54	43	47
Sugar errors		58	61	68

SALT	mothers (n=129) %	fathers (n=114) %	Total (n=243) %
Too much	71	80	75
Dangerous (>50% concentration)	65	58	62
Too little	29	20	25
Salt errors	61	67	63

* The odds of making SSS correctly using the pinch and scoop method are 11.99 times higher than when using spoons (confidence interval 4.33-35.87).

* SSS solutions have potentially dangerous amounts of salt which will lead to hypernatremia in children. These salt errors were usually made when spoons were used.

ORS Errors (NWFP)

ORS	mothers (n=127) %	fathers (n=111) %	Total (n=238) %
Hypertonic (>5% concentration)	65	82	71
Dangerous (>50% concentration)	31	42	36
Hypotonic	35	18	29

* A father is 2.42 times more likely to make a hypertonic ORS solution than a mother in NWFP (confidence interval 1.22-4.86).

* Errors made in ORS/SSS preparation are 72% for ORS and 68% for SSS.

4.6. Role of fathers.

Close to all the surveyed fathers (99%) feel that diarrhoea is a serious health problem. Fathers appear to be strongly involved in the problem of childhood diarrhoea as reflected in the high correlation in responses between fathers and mothers regarding perceived causes of diarrhoea and traditional home treatments used.

Close to one half of the surveyed fathers (45%) in NWFP and 21% in Balochistan stated that they will administer home treatments of medicines themselves to their sick child. It is not known if this is gender specific (ie only assisting with male children).

Only 1% of the surveyed fathers when specifically questioned about their role in taking care of the child with diarrhoea answered "nothing". Their stated role is to take their child to the BHU (56%) and to buy medicines (22%).

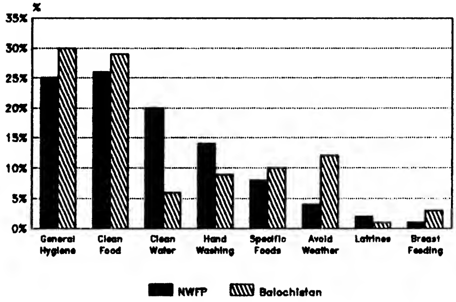
Although 43% of fathers felt that they are the ones to decide on referrals, when asked about this in the context of their responsibility in taking care of a sick child, only 4% felt this was their role. This discrepancy may either reflect a data collection error, or that the decision making process is a collective family one, not relegated to one individual. A further discrepancy is noted among the BHU caretaker's response (this group made up primarily of women). 48% felt that the BHU referral decision was theirs, while 25% responded that it was their husbands decision. On the other hand fathers perceive the role of their wife as keeping the child clean (29%) and giving home treatments (20%).

4.7. Concepts of prevention of diarrhoea.

Prevention of diarrhoea was not perceived as possible by 38% of fathers (NWFP: 54%; Balochistan: 22%) and 40% of mothers (NWFP: 50%; Balochistan: 29%).

The major ways that diarrhoea can be prevented according to both mothers and fathers are "clean food", "general hygiene" and "using clean water" (NWFP), and "general hygiene", "clean food", and "protect from weather" (Balochistan).

Figure 4. Prevention of diarrhoea (in %)



Source: Mothers/Fathers Survey

While protected food, water, and general hygienic conditions are seen as way to prevent diarrhoea, specific public health practices are not reflected in these responses; namely breast feeding, latrines, and avoiding feeding bottles.

Previous household observations have noted that soap is rarely used with hand washing before meals or during food preparation [Phase #1 Wheat ORT Project]. Focus group discussions with woman during these observations revealed that soap is used only after house work when the hands appear dirty. One rationale was brought forward that soap is not used as it is not available in the family compounds. Observations made during the mothers survey determined that 92% of households had soap.

As indirect evidence of the prevalence of bottle feeding, the survey teams made observations related to this practice. While active bottle feeding was observed in only 3% of the surveyed households, feeding bottles were seen in 13% of these homes. Therefore, the use of feeding bottles may be more prevalent than reported by mothers in other surveys.

4.8. Local Practitioners consulted by the refugee population.

To date, it was not known the kind of health care provider the refugees consult outside the BHU system, their knowledge base, and how diarrhoea cases are managed. Therefore to gain some insights, one local practitioner mentioned by a mother per cluster was interviewed. The majority of the sample consisted of physicians (68%).

No attempt was made to determine the type of training these groups had received, due to the complexity of this field of inquiry for our survey teams. This would warrant future studies.

Causes.

The reported presumed causes of diarrhoea cases seen by these providers can be divided into 4 general classifications

- Traditionally based (14%): weather related
  - hard foods
  - over-eating
- Specific public health problems (51%): food-borne
  - waterborne
  - bottle feeding
  - poor sanitation
  - lack of health education
  - food handling
  - flies
- General environment (17%): poor environmental conditions
  - hygiene
  - crowding
  - poverty
- Biomedical causes (20%): microbes
  - secondary diseases
  - malnutrition
  - prematurity
  - wrong medicines

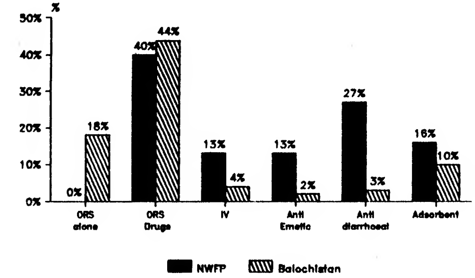
Diagnostic Categories and Treatments

Recommended treatments irrespective of the diagnosis are:

Intervention without respect to diagnosis	All n=172 %
ORS	42
ORS alone	10
Intravenous infusions	8
Anti-emetic	13
Anti-diarrhoeals	13
Adsorbents	13

Figure 5 gives the figures for each province.

Figure 5. **Recommended Treatments (in %) Irrespective of Diagnostic Category**



Source: Local Practitioner Survey

Balochistan uses more ORS alone and less intravenous infusions (IV), adsorbents and anti-emetics/diarrhoeals. ORS is not mentioned at all in NWFP.

The most commonly reported diagnostic categories for diarrhoea were Bacterial/Infectious, Bloody/Dysentery, and Simple/Watery. Figure 6 summarizes the recommended treatments per diagnostic category:

SUMMARY.

This report is the result of a study on diarrhoea management practices in the Afghan refugee community in the provinces North West Frontier Province (NWFP) and Balochistan, Pakistan. The study was conducted between February and December 1991 in cooperation with UNICEF, UNHCR and MSF-Belgium/Holland.

From all Afghan refugee villages in these 2 provinces 32 clusters in NWFP and 30 clusters in Balochistan were randomly selected. In each of these clusters, surveys, in-depth interviews and focus group discussions were held. The purpose of this study was to obtain information about attitudes and practices of mothers and to identify the role of men as fathers within the case management of diarrhoea in Afghan children.

The main findings are:

CDD TRAINING TARGETS

* Only 2% of mothers state that they turn to a health worker for advise when they do not know what to do in diarrhoeal case management.

* Daughters are second to the mother-in-law as the most common assistant for the mother in diarrhoeal case management.

* Both mothers and fathers are key decision makers on when to refer a child to a health facility for diarrhoea treatment.

* Fathers learn how to make ORT primarily from doctors (62%).

* Few fathers feel it their responsibility to teach their wives new things they learn about CDD (4%).

TRADITIONAL BELIEFS/HOME MANAGEMENT/CONCEPTS OF PREVENTION

* Hard meats, over-exposure to weather extremes, and bad breast milk are perceived as the major causes of diarrhoea.

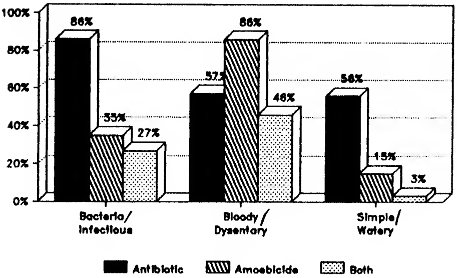
* The most common action taken at home in diarrhoea case management was herbal treatments. In NWFP, 40% of mothers took no action at all.

* The rationales for home treatments are primarily to stop diarrhoea, cleanse the stomach, or heat/cool the body.

* 58% of mothers wait 1 day or more before initiating a home treatment.

* Vomiting, dehydration, bloody stools, and eating/drinking poorly, were not among the reasons caretakers brought their child to the BHU for treatment.

Figure 6. DRUG THERAPY RECOMMENDED
Per Diagnostic Category



Source: Local Practitioner Interviews

To treat dysentery only 57% are recommending antibiotics, the first intervention of choice. Meanwhile, amoebicides are overrecommended for dysentery. The table below gives these figures for each province (in %).

Intervention		Bacterial/Infect		Bloody/Dys		Simple/Watery	
		NWFP	Baloch	NWFP	Baloch	NWFP	Baloch
	(n)	20	17	14	23	15	19
Antibiotic		85	88	57	57	87	32
Amoebicide		25	47	100	78	13	16
Both		15	41	57	39	0	5

Amoebicides are overrecommended for dysentery in both provinces: 100% of the local practitioners in NWFP and 78% in Balochistan. In NWFP a large percentage of local practitioners recommend antibiotics for simple diarrhoea (87%). In Balochistan this percentage is 32%.

Advise on fluids and foods.

Providers most commonly recommend ORS (25%) and water (24%) as a fluid therapy during diarrhoea, followed by breast milk (9%), and SSS (8%). Rice water was mentioned by 6% of the providers.

The foods recommended follow refugee practices of rice products (24%), soft food (15%), bananas (13%), breast milk (10%), and yogurt (5%).

ORS/SSS.

98% of the providers said that they recommend ORS. Providers were asked to describe in detail the instruction they give to the caretakers of the patients. Only 48% of them gave instructions on preparation of ORS. 93% in Balochistan of the providers say they recommend salt-sugar solution and only 33% in NWFP. In NWFP none of these recited the correct recipe, whereas in Balochistan only 27% were correct.

Practices as observed.

Due to the possible discrepancies between what may be reported practice and actual practice, a small observational study (n=28) was done on local practitioners working in and around the refugee villages of Peshawar. The survey team working in pairs (female Pakistani women) dressed as Afghan woman in burkas and took a weaning aged child with a mock case of simple diarrhoea to various offices. They memorized the following case history.

Case History:

> The child was afebrile, without any other medical problems, and had diarrhoea for 3 days, at approximately 6 yellow, loose motions per day without blood or mucous. There had been no vomiting or abdominal pain. While the child's appetite was diminished, soft rice and fluids (breast milk and teas) were given at home. The child had been urinating with the same pre-morbid frequency and color. The child was slightly more irritable and crying but producing tears. Delivery history was without complications and the mother was to say the child did not seem small at birth. The child had a normal medical history.

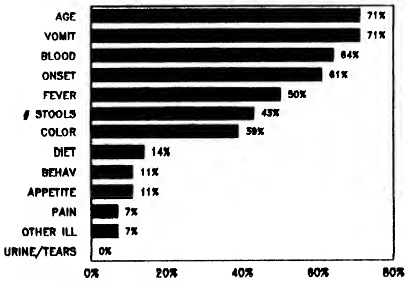
They presented themselves to the providers requesting treatment for the child's diarrhoea, but refused all injections. After the visit outside of the office, the team marked on a checklist what history was asked, exam components performed, and health education or instructions given. They attached the written prescription to the data collection form. The sample included 11% dispensers, and the remainder were physicians, 54% of which had an MBBS degree.

History.

The average number of questions asked was 4, the range between 1 and 10. Age, whether the child had been vomiting, presence of blood or mucous, and onset were the most common questions asked on the history. No questions were asked about previous medical histories or drug allergies. Questions in order to establish dehydration status were poorly addressed (stool frequency: 43%; urine output/color: 0%; tearing: 0%). Results are given in figure 7.

Figure 7. MEDICAL HISTORIES

Questions Asked

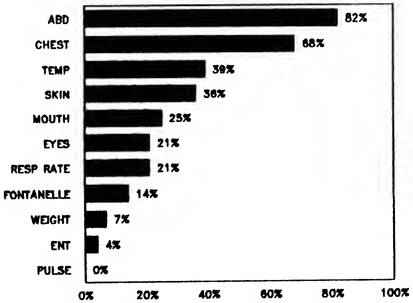


Source: Local Practitioner Observational

Exams performed.

Figure 8 gives the exams performed by the local practitioners. An average of 3 items were examined with a range of 1 to 7. The most frequent parts examined were the abdomen (the majority only by auscultation) and chest. No stool exams or other lab work was ordered. Few providers covered an estimation of hydration status as part of the exam.

Figure 8. PHYSICAL EXAMINATIONS

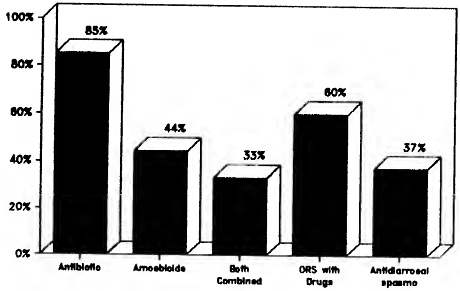


Source: Local Practitioner Observational

Treatment.

Close to two thirds prescribed ORS for this case. An antibiotic was prescribed by 85% of the providers and 44% an amoebicide, while 33% prescribed both. Over a third (39%) used more than one antibiotic, and a quarter (25%) used two amoebicides. 37% prescribed anti-diarrhoeals/spasmotics (see also figure 9). Only one provider prescribed ORS alone yet this was with a pectin product. Many of the physicians insisted in giving an injection, one refusing to treat the child unless the caretakers allowed an injectable.

Figure 9. DRUGS PRESCRIBED (In %)
For Simple Non-Dysentery Diarrhoea



Source: Local Practitioner Observational

Home fluid and dietary advise.

21% of the providers mentioned something about fluids, the majority recommending water or breast milk (2 providers). One provider insisted that all fluids be discontinued except ORS.

Diet therapy was discussed by 29% of the providers. Foods included shola (soft rice) bananas, soft foods and kijiri. Foods to be excluded were fruits and non-breast milk (the latter recommended by one provider).

ORS and medication instructions.

85% of the providers who prescribed ORS explained how to mix it, but no demonstrations were provided. 35% explained the amounts to be given, 29% how often to give it, and only 18% how long to continue with ORS. Instructions were slightly better with medications. Dosage was explained by 54%, how often to give them by 61%, but in terms of duration, this was described by only 14% of the providers.

Health education.

Advise about how to prevent diarrhoea was explained to the "mother" by only 18% of the providers. Points discussed were: breast feeding (3), clean water consumption, immunization, "avoidance of cow milk", and "keeping the child clean".

5. RECOMMENDATIONS.

CDD TRAINING TARGETS/METHODS

* Mothers remain the primary target.

* Although they may be difficult to reach, younger females siblings should be a target.

* If grandmothers are not reached, they may forbid certain CDD interventions.

* Fathers are the recipients of CHW training, the family purchaser, and co-decision makers/BHU caretakers. Therefore their training should emphasize:

-Sharing CDD information with his wife
-When to refer to health care center
-Dangers of drug therapy
-Dangers of baby bottles
-Provision of ORS
-Provision of soap for hand washing
-Provision of latrines
-Provision of a safe water supply

* Although "reported" percentage of households that have a literate member are 53%, picture fliers to take home to reinforce messages with simple written messages could be considered.

* Although radios are not universally available, this method for information dissemination should be used.

* Mullahs should not be considered for CDD information dissemination.

TRADITIONAL BELIEFS and HOME MANAGEMENT

* The fact that breast milk cannot cause diarrhoea must be emphasized by an EXPLANATION of why this is not possible. The analogy of the mother's body being a very good FILTER (like cheese clothe) that PURIFIES breast milk could be used.

* Training should emphasize "DO NOT WAIT" to start treatment at home with home fluids.

* The referral points that must be emphasized are blood in stools, "dryness", vomiting, and eating/drinking poorly.

* Early signs of dehydration should focus not only on thirst, but dry lips, and a dry mouth, while danger signs of "too much dryness" should highlight sunken eyes, sunken fontanelle, loose skin, and weakness.

* ORS and fluid therapy can be promoted as a means of keeping the body and intestines "fresh" and washing away the impurities. Fluids can be given warm or cool depending on the season in order to be consistent with traditional beliefs regarding weather-related causes of diarrhoea.

FLUID and ORT THERAPY

* Efforts should be made to give mothers confidence in their own home fluids. ORS should not be promoted to the exclusion of other home fluids in non-dehydrated cases, especially if it is not available or the child refuses to take it.

* If ORS is refused the mother should be encouraged to try other fluids that the child will accept.

* Families should be warned not to use the powder alone or an incomplete package.

* Use of a medium sized teapot (with pictures) can be considered for water measurement, yet marking a mothers own container is the safest, although tremendously labor intensive.

* The idea of producing a 500cc sized packet that can serve as a water measure (like Knorr soup packages) could be explored in terms of cost-benefits. This would avoid water measurement errors and attempts by the consumers to conserve the ORS.

* The concept of offering fluids after each loose motion or hourly rather than just when the child wants it needs to be impressed upon mothers.

* As ORS made in the home will frequently be hypertonic, a food-based home solution should be considered as the first home treatment of choice to be used.

FOOD THERAPY

* A message should be designed to inform mothers that large amounts of food ARE ABSORBED during diarrhoea, and furthermore that starches help diminish stool frequency rates.

* As "weakness" and diminished activity levels of children are well recognized, food therapy can be promoted along these lines.

* A message to promote "small and frequent feedings" (± 6 times) a day of soft foods to IMPROVE THE APPETITE and PREVENT WEAKNESS may be a more credible food therapy concept for mothers.

* As few mothers currently offer food more than 4 times a day it may be difficult for her to follow the 6 times a day recommendation. If six times a day is not possible the mother may become discouraged.

* The promotion of "soft" foods such as shola (soft rice), nan, bananas, yogurt, potatoes, and eggs should be well accepted. There will likely be resistance to the addition of oil/ghee as it is a taboos food during diarrhoea. The same applies to kijiri as lentils may be seen as a hard food and or gas producing.

CONCEPTS OF PREVENTION

* As waterborne and food-borne sources of diarrhoea seen fairly well recognized, health education energy may need to give more attention to latrines and feeding bottles.

* Although hand washing is practiced as part of ablutions or after housework, the IMPORTANCE OF SOAP in reducing diarrhoeal diseases is clearly missed. A MAJOR HAND WASHING WITH SOAP CAMPAIGN is strongly recommended.

PROVIDER TRAINING

* An attempt should be made to provide training for dispensers and physicians practicing around refugee villages.

* This training should include a review of the history and physical exam required for a child with diarrhoea.

* Along with ORS, training should stress the risks of drug therapy by reviewing in detail all the LOCALLY available drugs by brand name and generic with the indications and contraindications of each. WHO publication, The Rational Use of Drugs in the Management of Acute Diarrhoea in Children can serve as guideline.

* Contacts made with a health care provider for an episode of diarrhoea may be the only opportunity a family has to receive health information. For them, this source may be the most credible as well. Therefore, **physicians must have specialized training on how to deliver brief but specific preventive health education messages** that take into account their the time constraints of their practices.

FURTHER STUDIES

* A study to trace if sentinel CDD messages given to fathers by CHW are reaching their wives would give a clearer indication of the impact of this program.

* As a means to evaluate physician CDD training, an observational case control study similar the design of this small pilot could be carried out on a larger sample with CDD trained (case) and untrained (control) providers.

* A case control study on BHU cases with a larger sample size with and without dehydration could be conducted to better determine referral cues and home management in association to disease severity.

REFERENCES.

Murphy, Helen. Phase #1 Report Wheat Based Oral Rehydration Therapy Project. October-December 1990.

CAR (Commissioner Afghan Refugees), 1990.
Camp-wise figures of Afghan refugees for the month ending 15 dec. 1990.

WHO, without year.
Evaluate vaccination coverage, training for mid-level managers.

ANNEXES

* Few mothers or fathers recognize the role of feeding bottles as a significant cause of diarrhoea, while breast feeding, use of latrines, and soap for hand washing are not understood as ways to prevent diarrhoea.

FOOD AND FLUID THERAPY IN THE HOME

* Reasons not to increase fluids in NWFP were primarily because the child refused or was not thirsty (51%) while in Balochistan it was due to the belief that fluids increase diarrhoea (51%).

* The most common fluid given prior to BHU visit in NWFP was water and tea, while in Balochistan it was water and SSS.

* Meats and oil/ghee are common taboos in dietary management of diarrhoea.

* 63% of mothers stopped or reduced feeding during diarrhoea, the most common reason was due to poor appetite (51%) and the perception that foods increase diarrhoea (30%).

ORT USE

* The most common perception about how ORS/SSS works is first to stop diarrhoea (38%) then to replace lost fluids (27%).

* Reported previous use of ORS in NWFP and SSS in Balochistan was high (92% and 64% respectively) but actual use by mothers whose child had diarrhoea in the last two weeks was low (6% ORS and 20% SSS).

* The major errors recited in SSS preparation were adding too much salt (75%).

* 71% of the recited recipes for ORS would yield a hypertonic solution, of which 36% would be dangerous (>50% concentration).

LOCAL PRACTITIONERS CONSULTED BY REFUGEES OUTSIDE THE BHU SYSTEM

* 42% of the interviewed local practitioners recommended ORS, all of these in combination with drugs in NWFP, but in Balochistan, 10% recommended ORS alone for non-dysentery diarrhoea.

* Infusions, anti-emetics, anti-diarrhoeals, and adsorbents were recommended more often in NWFP than in Balochistan.

* Only 57% of the providers recommended antibiotics for dysentery, while amoebicides were recommended by 86% of the respondents.

* History and physical exams performed on a mock case of simple/non-dysentery case of diarrhoea were incomplete with regard to assessing dehydration status.

ANNEX I.

DIARRHOEA KAP 30 CLUSTER SURVEY: MOTHERS

Because the frequencies are incorporated, the layout of the questionnaire printed in this annex is slightly different than the original form.
The originals can be sent on request.

Sample sizes were 226 for NWFP and 210 for Balochistan. In these tables, n refers to the number of responses. At some questions more answers were possible, and therefore n can be greater than 226 respectively 210.

	NWFP %	Baloch %	Both %
AGE OF CHILD	(n=226)	(n=209)	(n=435)
<12 months	33	39	35
12-24 months	34	35	35
2-4 years	33	26	30
ETHNIC GROUP	(n=226)	(n=209)	(n=435)
Pashtun	82	86	84
Tajik	6	0	3
Nuristani	3	0	1
Baluch	2	13	7
Kuchi	0	1	1
Other	7	0	3
PROVINCE OF ORIGIN	(n=200)	(n=202)	(n=402)
Kandahar	0	55	28
Nangarhar	27	0	13
Helmand	0	31	16
Paktia	22	1	11
Kabul	12	1	6
Kunduz	9	4	6
Kunar	10	0	5
Ghazni	8	1	4
Laghman	6	0	3
Baghlan	5	0	2
Wardak	0	4	2
Logar	3	0	1
Other	1	5	3

1.WHAT THINGS CAN CAUSE DIARRHOEA ?	NWFP % (n=801)	Baloch % (n=629)	Both % (n=1375)
Foods	41	46	43
of which:			
- Bad mix of foods	17	52	34
- Hard food	20	20	20
- Dirty/spoiled food	18	5	13
- Spicy food/oily food	11	14	12
- Eating too much	12	4	8
- Hot or Cold Natured food	6	1	4
- Eating too little	5	3	3
- Food not liked by child	4	0.3	3
- Hot or Cold Temperature food	3	1	2
- Other	4	1	1
Weather	14	25	19
Teething	16	3	11
Other illnesses	13	8	9
Bad breast milk	4	9	7
Microbes	5	7	6
Evil eye/jinns	5	0.3	3
Falls/accidents	1	1	1
Other	1	0.2	1

	NWFP %	Baloch %	Both %
2. WHAT DO YOU THINK COULD HAVE CAUSED THIS CASE OF DIARRHOEA THAT (NAME) HAD MOST RECENTLY ?	(n=274)	(n=313)	(n=556)
Foods	49	44	45
of which:			
- Bad mix of foods	16	53	38
- Hard food	19	21	21
- Spicy food/oily food	14	13	15
- Dirty/spoiled food	16	2	10
- Eating too much	8	4	6
- Hot or Cold Natured food	7	0	3
- Hot or Cold Temperature food	3	0	2
- Eating too little	1	2	2
- Food not liked by child	4	0	2
- Other	12	5	1
Weather	14	19	17
Bad breast milk	9	17	14
Other illnesses	12	9	11
Teething	7	6	7
Evil eye/jinns	6	0.3	3
Microbes	2	2	2
Falls/accidents	0	2	1
Other	1	0.6	0
3. WHAT DO YOU CALL THIS DIARRHOEA ?	(n=234)	(n=265)	
Nasa	28		
Dastoona	27		
Paich	21		
Ishal	9		
Other	15	4	
Green diarrhoea		26	
Simple diarrhoea		26	
Watery diarrhoea		13	
Yellow diarrhoea		12	
Hot diarrhoea		7	
Mucous diarrhoea		7	
Bloody diarrhoea		5	
4. WHAT WAS THE FIRST THING YOU DID AT HOME FOR (NAME'S) DIARRHOEA ?	(n=224)	(n=206)	(n=430)
Herbs	24	59	41
Nothing	40	8	24
ORS/SSS	6	20	13
Medicines	15	4	10
Others	15	8	12

	NWFP %	Baloch %	Both %
5. HOW LONG DID YOU WAIT BEFORE STARTING THIS HOME TREATMENT ?	(n=136)	(n=182)	(n=318)
Less than 1 day	53	34	42
1 day	17	23	20
2 days or more	30	43	38
6. WHO (FIRST) TAUGHT YOU ABOUT THIS TREATMENT ? (ONE ANSWER ONLY)	(n=138)	(n=187)	(n=325)
Female relative	39	43	41
Health worker	19	18	18
Male relative	9	6	8
Media	3	0	1
Unknown	30	33	32
7. DURING THE DIARRHOEA DID YOU CHANGE THE AMOUNT OF FLUID GIVEN ? (* includes water and breastmilk, but not ORS or SSS)	(n=224)	(n=209)	(n=433)
Stopped	1	0	1
Decreased	15	20	17
Unchanged	17	17	17
Increased	67	63	65
8. IF STOPPED, DECREASED OR UNCHANGED, WHY ?	(n= 69)	(n= 81)	(n=150)
Child vomiting	7	10	9
Child not thirsty/refuses	51	31	40
Drinks increase diarrhoea	28	51	40
Unknown	12	0	6
Other	3	9	5
9. IF GAVE FLUIDS DURING DIARRHOEA, HOW MUCH FLUID DID YOU OFFER (NAME) AT A TIME ? (this question is about fluids other then ORS/SSS)	(n=223)	(n=200)	(n=423)
teaspoons	19	15	17
1/2 cup/glass	39	46	42
1 cup/glass or more	35	36	35
bottle	5	3	6

	NWFP %	Baloch %	Both %
10.HOW MANY TIMES IN THE DAY DID YOU OFFER (NAME) SOMETHING TO DRINK DURING DIARRHOEA ?			
	(n=223)	(n=193)	(n=416)
On demand	44	63	53
Every hour or less than every hour	22	4	14
1 to 2 times a day	5	7	6
3 times a day	19	24	21
After each loose stool	1	2	1
Other	9	1	5
11.HAVE YOU EVER USED RICE WATER FOR DIARRHOEA ?	(n=226)	(n=208)	(n=434)
	31	21	26
12.WHAT DO YOU CALL SALT SUGAR SOLUTION (explain SSS)			
	(n=226)	(n=173)	(n=399)
Nimkol	29	17	24
Unknown	37	0	21
Sugar salt water	0	26	11
Puri	0	21	9
Sharbit	12	0	7
Malga	10	0	6
Boiled water	0	11	5
Salty water	0	10	5
Other	13	15	14
13.WHAT DO YOU CALL THIS (show ORS packet)	(n=226)	(n=173)	(n=399)
Purai	37	58	47
Nimkol	46	4	26
Puri packet	0	31	14
Glucose	6	1	4
Powder	6	0	3
Unknown	1	0	0
Other	5	7	6
14.NWFP: HAVE YOU EVER USED ORS PACKETS FOR DIARRHOEA ? Balochistan: HAVE YOU EVER USED SSS FOR DIARRHOEA ?			
	(ORS)	(SSS)	(ORS/SSS)
	(n=226)	(n=209)	(n=435)
	92	64	78

(If no Skip to Q#26)

	NWFP	Baloch	Both
	%	%	%

15.NWFP: IF YES, WHAT ARE THE BENEFITS OF ORS PACKETS ?
Balochistan: IF YES, WHAT ARE THE BENEFITS OF SSS ?

	(ORS) (n=412)	(SSS) (n=224)	(ORS/SSS) (n=631)
Stops diarrhoea	33	36	35
Stops dryness/replaces lost water	28	23	27
Stops weakness/makes child stronger	11	13	12
Stops thirst	7	10	8
Stops vomiting	8	7	7
Nothing	4	7	5
Cools intestines	4	2	2
Relieves fever	2	1	2
Other	2	1	2

16.NWFP: DO YOU CONSIDER ORS PACKET A HOT OR COLD SOLUTION ?
Balochistan: DO YOU CONSIDER SSS A HOT OR COLD SOLUTION ?

	(ORS) (n=208)	(SSS) (n=132)	(ORS/SSS) (n=340)
Hot	2	7	4
Cold	65	71	67
Neutral	13	3	9
Unknown	20	20	20

17.CAN IT BE GIVEN IN ALL KINDS OF DIARRHOEA OR NOT ?

	(ORS) (n=207)	(SSS) (n=131)	(ORS/SSS) (n=338)
	87	83	85

18.NWFP: ARE THERE ANY PROBLEMS OR COMPLAINTS ABOUT ORS PACKETS ?
Balochistan: ARE THERE ANY PROBLEMS OR COMPLAINTS ABOUT SSS ?

	(ORS) (n=208)	(SSS) (n=133)	(ORS/SSS) (n=341)
	17	8	13

19.IF YES, WHAT ARE THE PROBLEMS/COMPLAINTS ?	(ORS) (n= 33)	(SSS) (n= 5)	(ORS/SSS) (n= 38)
Taste	68	80	73
Child vomits	12	0	11
Other	21	20	16

20.NWFP: HOW MUCH WATER DO YOU USE TO MAKE YOUR ORS PACKET
(show samples, mother choosing the one she uses)
Balochistan: HOW MUCH WATER DO YOU USE TO MAKE YOUR SSS (show method)

	NWFP % (ORS) (n=201)	Baloch % (SSS) (n=132)	Both % (ORS/SSS) (n=333)
Correct recipe	30	38	33
Kind of container used			
Glass	62	77	69
Teapot	20	2	13
Jug	12	0	7
Other	6	21	11
Amount of fluid container holds			
≤ 150 cc	27	7	19
150 ≤ 300 cc	28	23	26
300 ≤ 600 cc	18	60	34
600 ≤ 1000 cc	23	10	18
> 1000 cc	6	1	4
Number of containers used			
< 1	3	5	3
1	52	81	63
2	15	10	13
> 2	30	5	20
Amount of powder used			
NWFP: Full packet	66		
Partial packet	24		
Teaspoons	10		
Balochistan:			
Sugar: scoops		63	
spoons		37	
Salt : pinches		78	
spoons		22	

	NWFP %	Baloch %	Both %

21.NWFP: HOW MUCH OF THE ORS SOLUTION DO YOU OFFER (NAME) AT A TIME?
Balochistan: HOW MUCH OF THE SSS SOLUTION DO YOU OFFER (NAME) AT A TIME?

	(ORS) (n=194)	(SSS) (n=132)	(ORS/SSS) (n=326)
teaspoons	25	19	23
1/2 cup or glass	42	38	41
1 cup/glass or more	27	33	30
bottle	3	10	6
other	3	0	2

22.NWFP: HOW MANY TIMES IN THE DAY DO YOU OFFER (NAME) THE ORS SOLUTION ?
Balochistan: HOW MANY TIMES IN THE DAY DO YOU OFFER (NAME) THE SSS SOLUTION

	(ORS) (n=140)	(SSS) (n= 60)	(ORS/SSS) (n=200)
Every hour or less than every hour	32	10	25
1 or 2 times a day	5	18	9
3 times a day	24	60	35
On demand	31	10	25
After each loose stool	2	0	2
Other	6	2	5

23.WHAT DO YOU STORE IT IN ?	(n=207)	(n=133)	(n=340)
Covered	94	92	93
Uncovered	6	8	7

24.HOW LONG DO YOU KEEP THIS SOLUTION BEFORE THROWING IT OUT ?

	(n=204)	(n=133)	(n=337)
1-12 hours	61	69	64
13-24 hours	27	23	25
More than 24 hours	12	8	10

25.HOW MANY DAYS DO YOU TREAT (NAME) WITH THE SOLUTION ?

	(n=195)	(n=131)	(n=326)
1 or 2 days	17	21	18
3 days	35	51	41
Until diarrhoea stops	48	28	40

26.DO YOU NORMALLY (= WHEN NOT SICK WITH DIARRHOEA) GIVE SOLID FOODS TO (NAME) ?	(n=225)	(n=209)	(n=434)
Yes	77	69	73
No,(Skip to Q# 32)	23	31	27

	NWFP %	Baloch %	Both %
27. IF YES, DURING THE DIARRHOEA DID YOU CHANGE THE AMOUNT OF SOLID FOODS GIVEN ?	(n=174)	(n=144)	(n=318)
Stopped	12	4	8
Decreased	57	51	54
Unchanged	16	29	21
Increased	16	17	16
28. IF STOPPED, DECREASED OR UNCHANGED, WHY ?	(n=146)	(n=128)	(n=287)
Child vomiting	3	8	5
Child not hungry/refused food	66	37	50
Food increases diarrhoea	23	42	30
Food not digested during diarrhoea	6	12	8
Other	2	2	6

(IF NO FOOD IS GIVEN DURING DIARRHOEA, SKIP TO Q#32)

	NWFP %	Baloch %	Both %
29. WHAT FOOD DID YOU GIVE TO (NAME) DURING THE DIARRHOEA ?	(n=154)	(n=144)	(n=318)
rice (shola)	77	71	86
nan	71	55	81
potato	40	18	48
biscuit	42	10	46
yogurt	53	61	75
milk	40	27	57
eggs	33	17	45
spinach	45	44	86
banana	62	60	83
30. HOW MANY TIMES IN THE DAY DID YOU OFFER FOOD TO (NAME) WHEN SICK WITH THIS DIARRHOEA ?	(n=150)	(n=139)	(n=289)
1-2 times a day	15	48	31
3 times a day	60	47	54
more than 3 times a day	25	5	15
31. WHAT FOODS DO YOU NEVER GIVE TO (NAME) WHEN HE/SHE HAS DIARRHOEA ?	(n=174)	(n=144)	(n=318)
Meat (hard)	71	62	67
Oil/ghee	67	45	57
Vegetables (hard: beans/peas/corn/ladyfingers)	60	35	41
Potatoes	27	47	36

	NWFP %	Baloch %	Both %
32.WHAT DRINKS DO YOU **NEVER** GIVE TO (NAME) WHEN HE/SHE HAS DIARRHOEA ?	(n=314)	(n=415)	(n=729)
Plain water	32	17	24
Tea	46	55	51
Breast milk	5	3	4
Milk (other than breast milk)	16	22	20
Other	1	3	2
33.DID YOU GET ANY TREATMENTS FOR (NAME) OUTSIDE OF THE HOME, LIKE BUY MEDICINES, GO TO A DOCTOR, OR SEE A TRADITIONAL HEALER ?	(n=224)	(n=220)	(n=444)
No	17	7	12
Buy medicine	8	11	10
Went to doctor	72	78	75
Saw traditional healer	2	4	3
35.DURING DIARRHOEA, IF YOU DO NOT KNOW WHAT TO DO **WHO** DO YOU MOST OFTEN GET ADVISE FROM ? (1 person only)	(n=222)	(n=207)	(n=429)
Female relative (mostly mother in law)	29	53	41
Male relative (mostly husband)	48	14	31
Health worker	3	1	2
No one	19	15	17
Other	1	17	9
36.WHEN YOU ARE TOO BUSY, WHO MOST COMMONLY HELPS YOU TAKE CARE OF (NAME) WHEN HE OR SHE IS SICK WITH DIARRHOEA ? (Relative to the CHILD—one answer only)	(n=225)	(n=205)	(n=438)
sibling	27	44	32
older female relative (mostly grandmother or aunt)	46	47	46
older male relative	3	3	3
anyone who is free	10	0	5
none	14	6	14
37.IS THERE ANY WAY TO PREVENT (NAME) FROM GETTING DIARRHOEA ?	(n=225)	(n=210)	(n=435)
	50	71	60

* 85% of the providers treated this case with an antibiotic, 44% with an amoebicide, and 33% used both in combination. 60% prescribed ORS in combination with drug therapy and 37% used anti-diarrhoeal/spasmotics.

* Only 15% of the providers discussed health education with the "mother".

The main recommendations are:

CDD TRAINING TARGETS

* Although they may be difficult to reach, younger females siblings should be a target.

* Fathers' training should emphasize sharing information with their wives, referrals, dangers of drug therapy/feeding bottles, and the provisions of: ORS, soap, latrines, safe water.

TRADITIONAL BELIEFS/HOME MANAGEMENT/CONCEPTS OF PREVENTION

* The fact that breast milk cannot cause diarrhoea must be emphasized by an EXPLANATION of why this is not possible. The analogy of the mother's body being a very good FILTER (like cheese clothe) that PURIFIES breast milk could be used.

* Training should emphasize "DO NOT WAIT" to start treatment at home with home fluids.

* The referral points that must be emphasized are blood in stools, "dryness" (dry lips/mouth), vomiting, and eating/drinking poorly.

* ORS and fluid therapy can be promoted as a means of keeping the body and intestines "fresh" and washing away the impurities. Fluids can be given warm or cool depending on the season in order to be consistent with traditional beliefs regarding weather-related causes of diarrhoea.

* Messages about prevention of diarrhoea must emphasize SOAP with hand washing, latrines, and the dangers of feeding bottles.

FLUID/FOOD THERAPY

* As ORS made in the home will frequently be hypertonic, a food-based home solution should be considered.

* Oil should not be part of the recommended CDD diet during diarrhoea as it is not acceptable.

* A message should be designed to inform mothers that large amounts of food ARE ABSORBED during diarrhoea and starches help diminish stool frequency rates.

	NWFP %	Baloch %	Both %
38.IF DIARRHOEA IS PREVENTABLE, HOW ?	(n=253)	(n=267)	(n=520)
using latrines	1	1	1
hand washing	14	13	14
breastfeeding	1	3	2
not using feeding bottles	0	0	0
clean water	19	5	12
clean food	27	23	25
hygiene	27	35	31
specific food	6	12	9
weather	4	9	6
39.DO YOU HAVE SOAP IN THE HOUSE ?	(n=223)	(n=210)	(n=433)
Yes	95	88	92
40.CAN ANYONE READ IN THIS HOUSEHOLD ?	(n=224)	(n=210)	(n=434)
Yes	53	67	60
of which: adult male	53	78	72
male child	23	19	23
OBSERVATIONS	(n=226)	(n=210)	(n=434)
Are there feeding bottles in the house?	11	16	13
Were any children bottle fed during the interview?	4	1	3
Are there any dried milk tins in the house?1)	22	30	26
Does the household have a 1 liter teapot?	67	51	59

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1) This question was taken out from the analysis, because having dried milk tins in the house is not a good indicator for using powdermilk. Empty milk tins are sold at the bazaar for container usage.

ANNEX II.

DIARRHOEA KAP 30 CLUSTER SURVEY: FATHERS

Because the frequencies are incorporated, the layout of the questionnaire printed in this annex is slightly different than the original form. The originals can be sent on request.

Sample sizes were 220 for NWFP and 210 for Balochistan. In these tables, n refers to the number of responses. At some questions more answers were possible, and therefore n can be greater than 220 respectively 210.

	NWFP %	Baloch %	Both %
AGE OF FATHER	(n=219)	(n=210)	(n=429)
< 20	1	1	1
20-29	22	18	20
30-39	35	31	33
40-49	28	25	26
50-59	11	15	13
≥ 60	4	10	7
EMPLOYED	(n=220)	(n=208)	(n=428)
Yes	67	78	73
ETHNIC GROUP	(n=220)	(n=209)	(n=429)
Pashtun	83	90	86
Tajik	8	0	4
Baluch	2	11	6
Nuristani	3	0	2
Other	4	0	2
PROVINCE OF ORIGIN	(n=179)	(n=205)	(n=406)
Kandahar	0	43	22
Nangarhar	28	0.5	13
Helmand	0	32	16
Paktia	16	3	14
Kabul	14	5	3
Kunduz	12	3	7
Kunar	12	0.5	6
Ghazni	2	4	3
Laghman	7	0.5	3
Baghlan	5	0	2
Wardak	0	5	3
Logar	4	0.5	2
Badakhshan	0	3	2

	NWFP %	Baloch %	Both %
1. HAVE YOU RECEIVED ANY INFORMATION ABOUT DIARRHOEA FROM A COMMUNITY HEALTH WORKER (CHW)?	(n=218)	(n=210)	(n=428)
	27	41	33
Controlled for camps with a CHW programme	31	41	42
2. DO YOU HAVE ANY IDEA WHAT THINGS CAN CAUSE DIARRHOEA?	(n=220)	(n=210)	(n=430)
Yes	90	99	94
3. IF YES, WHAT ARE THESE?	(n=758)	(n=632)	(n=1355)
Foods	41	41	41
of which:			
- Bad mix of foods	13	44	27
- Dirty/spoiled food	28	14	21
- Indigestible	15	15	17
- Eating too much	15	4	10
- Spicy food	7	9	9
- Eating too little	5	4	5
- Hot or Cold Temperature food	4	1	4
- Hot or Cold Natured food	6	1	3
- Food not liked by child	2	3	3
- Other	4	7	3
Weather	18	26	22
Microbes	10	18	15
Teething	11	1	7
Bad breast milk	3	7	5
Other illnesses	3	4	4
Water	3	0.3	2
Fever	1	3	2
Evil eye/jinns	2	0	1
Flies	2	0	1
Other	0	1	1
4. CAN DIARRHOEA BE SERIOUS?	(n=222)	(n=208)	(n=425)
Yes	99	99	99

	NWFP %	Baloch %	Both %
5. WHEN IS DIARRHOEA SERIOUS?	(n=540)	(n=590)	(n=1064)
child passing too many stools	20	23	23
weak	22	18	21
fever	9	19	15
vomiting	7	13	11
dry	22	5	11
blood in stool	7	6	7
color of skin changes	8	5	7
other	4	11	5
6. WHO USUALLY MAKES THE DECISION THAT YOUR CHILD MUST BE TAKEN TO A DOCTOR?	(n=219)	(n=210)	(n=429)
myself	62	24	43
my wife	21	69	44
my mother	9	6	8
other	9	1	5
7. WHO USUALLY TAKES YOUR CHILD TO THE DOCTOR?	(n=271)	(n=210)	(n=481)
myself	74	84	71
my wife	21	8	13
my mother	7	2	4
other	6	1	4
anyone who has time	15	5	9
8. WHAT HOME TREATMENTS ARE GIVEN FOR DIARRHOEA IN YOUR HOUSEHOLD BEFORE GOING TO THE DOCTOR WHEN ONE OF YOUR CHILDREN ARE SICK WITH DIARRHOEA?	(n=298)	(n=224)	(n=522)
Boiled water	8	1	5
Tea	6	0	3
Rice water	6	1	4
Herbs	34	59	45
SSS	8	21	13
ORS	6	5	6
Foods	14	3	10
Medicines	3	4	3
Unknown	9	5	7
Nothing	6	1	4
Other	0	1	0.4

	NWFP %	Baloch %	Both %
9. DO YOU EVER GIVE THESE HOME TREATMENTS OR MEDICINES TO YOUR CHILD YOURSELF?	(n=219)	(n=210)	(n=402)
Yes	45	21	32
10.NWFP: HAVE YOU EVER HEARD OF THIS FOR DIARRHOEA? (Show packet)			
Balochistan: HAVE YOU EVER HEARD OF THIS FOR DIARRHOEA? (explain SSS)	(ORS)	(SSS)	(ORS/SSS)
	(n=219)	(n=210)	(n=402)
Yes	93	73	83
(if does not know skip to question # 15)			
11.WHAT DO YOU CALL IT?	(ORS)	(SSS)	
	(n=210)	(n=153)	
Sugar and salt water/syrup	0	47	
Salty water	0	12	
Nimkol	48	11	
Purai	28	5	
Glucose	9	0	
Powder	6	0	
ORS	3	0	
Other	6	19	
Unknown	1	6	
12.NWFP: WHAT DO YOU THINK THE BENEFITS OF ORS PACKETS ARE?			
Balochistan: WHAT DO YOU THINK THE BENEFITS OF SSS ARE?	(ORS)	(SSS)	(ORS/SSS)
	(n=371)	(n=252)	(n=623)
Stops dryness/replaces lost water	31	21	27
Stops weakness/makes child stronger	14	16	15
Stops diarrhoea	30	35	32
Stops thirst	7	8	9
Stops vomiting	5	6	4
Replacement of salt	3	0	2
Cooling	2	2	2
Relieves fever	2	4	2
Cleans the stomach	1	2	1
Nothing	3	4	3
Other	4	4	4
13.NWFP: DO YOU KNOW HOW TO MIX THE ORS PACKET?			
Balochistan: DO YOU KNOW HOW TO PREPARE SSS?	(ORS)	(SSS)	(ORS/SSS)
	(n=203)	(n=152)	(n=355)
Yes	69	80	74

14. NWFP: IF YES, HOW? (ask for recipe, how does he measure 1 liter of water)
Balochistan: IF YES, HOW? (ask for recipe, how does he measure 1/2 liter of water)

	NWFP	Baloch	Both
	%	%	%
	(ORS)	(SSS)	(ORS/SSS)
	(n=138)	(n=121)	(n=259)
Correct recipe	25	26	25
Kind of container used			
Glass	68	93	79
Teapot	14	2	8
Jug	17	6	12
Other	1	0	1
Amount of fluid container holds			
≤ 150 cc	23	18	21
150 ≤ 300 cc	31	26	28
300 ≤ 600 cc	22	52	36
600 ≤ 1000 cc	20	4	13
> 1000 cc	4	0	2
Number of containers used			
< 1	6	4	5
1	51	74	62
2	16	15	15
> 2	26	7	17
Amount of powder used			
NWFP: Full packet	65		
Partial packet	24		
Teaspoons	11		
Balochistan:			
Sugar:		(n=111)	
scoops		69	
spoons		21	
pinches		10	
Salt :		(n=114)	
pinches		76	
spoons		19	
scoops		4	

	NWFP %	Baloch %	Both %
15.WHO DID YOU LEARN THIS FROM?	(n=134)	(n=120)	(n=254)
CHW	13	33	22
- controlled for camps with a CHW programme	17	33	22
Doctor	78	44	62
Media	2	13	8
Other	7	10	8
16.IS THERE ANY WAY TO PREVENT DIARRHOEA?	(n=218)	(n=209)	(n=427)
Yes	46	78	62
17.IF YES, HOW?	(n=261)	(n=351)	(n=612)
clean food	24	33	30
keep house/child clean	21	27	25
clean water	21	8	14
related to weather	3	14	10
keep from specific food	10	9	9
hand washing	13	5	9
breast feeding	1	3	2
using latrines	4	1	2
other	0	1	1
18.WHAT IS YOUR WIFE'S RESPONSIBILITY IN TAKING CARE OF YOUR CHILD WITH DIARRHOEA?	(n=455)	(n=333)	(n=788)
Everything	74	1	10
Cleaning child	30	27	29
Home treatments	7	38	20
Deciding when to take child to BHU	5	2	4
Taking child to doctor	7	11	8
Giving medicines	26	5	17
Dietary	6	14	9
Other	3	3	3

19.WHAT IS YOUR RESPONSIBILITY IN TAKING CARE OF YOUR CHILD WITH DIARRHOEA?

	(n=437)	(n=247)	(n=684)
Nothing, it is not my job	1	1	1
Buying medicines	25	16	22
Instructing wife about when to give medicines	12	1	8
Making decisions to take child to doctor	5	1	4
Taking child to doctor	45	75	56
Being sure the child gets proper care (supervision)	5	0	3
Teaching my wife about new things I learn about diarrhoea	4	2	3
- controlled for camps with a CHW programme	7	2	4
Other	3	5	3

ANNEX III.

DIARRHOEA KAP SURVEY: BHU: CARETAKER OF DIARRHOEA CASE UNDER 5

	NWFP %	Baloch %	Both %
AGE (in months)	(n= 29)	(n= 30)	(n= 59)
< 6	0	3	2
6-12	30	54	42
13-24	46	26	37
25-36	13	10	12
37-48	3	7	5
49-60	1	0	2
SEX	(n= 30)	(n= 30)	(n= 60)
male	57	43	50
female	43	57	50
PROVINCE OF ORIGIN IN AFGHANISTAN	(n= 30)	(n= 30)	(n= 60)
Jalalabad	40	0	22
Kandahar	0	37	18
Helmand	0	30	15
Paktia	13	0	3
Kabul	10	0	5
Kunduz	0	10	7
Other	37	23	30
ETHNIC GROUP	(n= 30)	(n= 30)	(n= 60)
Pashtun	87	77	82
Tajik	3	3	3
Uzbeck	0	3	2
Nuristani	3	0	2
Other	7	17	12
1.AGE OF CARETAKER	(n= 20)	(n= 29)	(n= 49)
< 20	0	3	2
20-29	60	34	43
30-39	35	28	31
40-49	5	28	18
≥50	0	10	6

	NWFP %	Baloch %	Both %
RELATION TO CHILD	(n= 30)	(n= 30)	(n= 60)
Mother	83	67	75
Father	3	13	8
Grandmother	13	13	13
Other	0	6	3
2. WHO DECIDED TO BRING CHILD TO BHU	(n= 31)	(n= 30)	(n= 61)
Mother	45	50	48
Father	26	23	25
Grandfather	16	3	10
Grandmother	6	17	11
Other	6	6	6
3. WHAT DO YOU THINK CAUSED (NAME'S) DIARRHOEA?	(n= 49)	(n= 89)	(n=138)
Foods	39	52	47
of which:			
- Hard	21	26	25
- Dirty/spoiled food	21	0	25
- Bad mix of foods	32	46	40
Weather	8	15	12
Teething	8	2	4
Other illnesses	10	2	5
Bad breast milk	14	11	12
Falls/accidents	0	1	1
Microbes	0	6	4
Evil eye/jinns	6	2	4
Fever	6	10	9
Other	0	1	1
4. WHY, HOW DOES THIS CAUSE DIARRHOEA IN THE BODY?			
5. WHAT DO YOU CALL THIS DIARRHOEA?	(n= 30)	(n= 49)	
Dastoona	40		
Nasnash	17		
Amal	13		
Paich	10		
Ishal	10		
Other	10		
Simple diarrhoea		31	
Green diarrhoea		27	
Watery diarrhoea		13	
Yellow diarrhoea		13	
Mucous diarrhoea		8	

* Food therapy can be promoted as "small and frequent feedings" (± 6 times) a day of soft foods to IMPROVE THE APPETITE and PREVENT WEAKNESS.

PROVIDER TRAINING

* An attempt should be made to provide training for dispensers and physicians practicing around refugee villages.

* This training should include a review of the history and physical exam required for a child with diarrhoea.

* Provider training should review in detail the appropriate use of antibiotics and amoebicides.

* Providers need training on how to give simple preventive health education.

	NWFP %	Baloch %	Both %
6. WHEN DID (NAME'S) DIARRHOEA FIRST START?	(n= 30)	(n= 25)	(n= 55)
1-3 days	13	36	24
4-10 days	60	24	44
> 10 days	27	40	33
7. WHAT SYMPTOM MADE YOU DECIDE TO BRING (NAME) IN TODAY?	(n=107)	(n= 93)	(n=200)
Stool increase in number	22	29	26
Stool color abnormality (blood, green, mucous)	7	3	6
Watery stool	8	0	3
Fever	19	26	22
Vomiting	7	13	10
Abnormal behaviour (crying/sleepy)	11	5	9
Weakness (will not walk, talk)	4	6	5
Refuses to eat	4	3	4
Dryness (any dehydration sign)/Sunken fontanel	5		4
Stomach pain/distension	5	4	5
Urine/cough	4	3	4
Other	3	3	4
8. DURING THE DIARRHOEA DID YOU GIVE (NAME) ANY DRINKS AT HOME? * breast milk, water	(n= 28)	(n= 29)	(n= 57)
Yes	93	97	95
9. IF NOT, WHY?			
10. IF YES, WHAT DRINKS DID YOU GIVE?	(n= 63)	(n= 47)	(n=110)
Water	35	38	35
ORS/SSS	16	43	25
Teas	27	5	17
Herbal	10	5	7
Breast milk	8	12	9
Milk	3	5	4
Other	1	5	3

	NWFP %	Baloch %	Both %
11. WHAT IS THE BENEFIT OF THIS DRINK?	(n= 70)	(n= 62)	(n=132)
Stops thirst	19	58	37
Stops diarrhoea	19	16	17
Replaces lost fluid	17	6	12
Strengthen child	13	6	10
Relieves hunger	14	2	8
Other	18	11	15
12. DO YOU NORMALLY GIVE FOODS TO (NAME)?	(n= 30)	(n= 30)	(n= 30)
Yes	80	80	80
No,(Skip to Q# 15)			
13. DID YOU GIVE (NAME) ANY FOODS SINCE HE/SHE GOT SICK WITH DIARRHOEA?	(n= 24)	(n= 24)	(n= 48)
Yes	75	75	75
14. IF NOT WHY?	(n= 9)	(n= 7)	(n= 16)
Child vomiting	11	0	6
Child not hungry/refused food	11	57	31
Food increases diarrhoea	78	29	56
Food not digested during diarrhoea	0	14	6
Other			
15. IF YES WHAT FOODS DID YOU GIVE?	(n= 50)	(n= 36)	(n= 86)
Nan	22	25	23
Shola	18	39	27
Vegetables			
16. WHAT IS THE BENEFIT OF THIS FOOD?	(n= 51)	(n= 20)	(n= 71)
Makes child strong	27	65	38
Stops diarrhoea	20	20	20
Hunger	29		21
Soften	18		13

	NWFP %	Baloch %	Both %
17. DID YOU GIVE (NAME) ANY MEDICINE BEFORE COMING TO THE BHU? (any type)	(n= 29)	(n= 30)	(n= 59)
Medicines	79	50	64
Home treatments	9	40	21
17a. WHY DID YOU GIVE THIS MEDICINE?	(n= 29)	(n= 13)	(n= 42)
Stops diarrhoea	52	77	60
17b. WHO RECOMMENDED THIS MEDICINE?	(n= 21)	(n= 15)	(n= 36)
Lay person	52	80	64
Health worker	48	20	36
17c. WHERE DID THE MEDICINE COME FROM?	(n= 25)	(n= 15)	(n= 40)
Health centre	64	20	48
Medical store	16	60	33
My house (left over medicine)	16	20	17
Traditional healers house	4	0	2

ANNEX IV.

DIARRHOEA KAP SURVEY QUESTIONNAIRE: LOCAL PRACTITIONER

	NWFP %	Baloch %	Both %
WHAT KIND OF LOCAL PRACTITIONER IS THIS PERSON?	(n= 30)	(n= 30)	(n= 60)
Private doctor	53	83	68
Medical storekeeper	7	13	10
Dispenser	40	3	22
1.WHAT IN YOUR OPINION ARE THE CAUSES OF DIARRHOEA IN CHILDREN YOU SEE IN THIS AREA?	(n= 90)	(n= 72)	(n=162)
Traditional beliefs	4	19	14
Specific primary health causes	57	45	51
Biomedical causes	16	25	20
General environment	23	8	17
2.WHAT KINDS OF DIARRHOEA DO YOU SEE? HOW DO YOU TREAT THIS?			
	(n= 75)	(n= 97)	(n=172)
Dysentery/bloody diarrhoea	19	24	22
Antibiotic	57	57	57
Amoebicide	100	78	86
Both	57	39	46
Bacterial/Infectious	25	18	22
Antibiotic	85	88	86
Amoebicide	25	47	35
Both	15	41	27
Simple/watery diarrhoea	20	20	20
Antibiotic	87	32	56
Amoebicide	13	16	15
Both	0	5	3
All	(n= 75)	(n= 97)	(n=172)
ORS	40	44	42
ORS alone	0	18	10
Intravenous infusions	13	4	8
Adsorbents	16	10	13
Anti-diarrhoeals	27	3	13
Anti-emetics	13	2	7

3.WHAT ADVISE DO YOU GIVE PARENTS ABOUT FLUIDS DURING DIARRHOEA?

	NWFP % (n= 62)	Baloch % (n= 71)	Both % (n=133)
ORS	24	25	25
Water	24	24	24
Breast milk	13	6	9
Tea	10	1	5
Rice water	8	4	6
Milk	5	7	6
SSS	5	11	8
NaH$_2$O	2	3	3
Juices	1	6	4
Soups	1	3	2
Other	5	10	8

4.WHY?

5.NWFP: WHAT ADVISE DO YOU GIVE PARENTS ABOUT FEEDING DURING DIARRHOEA?

	(n= 82)
Rice	24
Banana	13
Soft	15
Breast milk	10
Yoghurt	5

5.BALOCHISTAN: WHAT ADVISE DO YOU GIVE PARENTS ABOUT USE OF BOTTLES?

	(n= 30)
Advise mother against ever using bottles	53
Advise mother on how to sterilize bottles	47

6.WHY?

7.DO YOU EVER RECOMMEND ORS PACKETS?	(n= 28)	(n= 30)	(n= 98)
Yes	93	100	98

8.NO, WHY NOT?

	NWFP	Baloch	Both
	%	%	%
9.WHAT INSTRUCTIONS DO YOU GIVE A PARENT WHEN RECOMMENDING ORS	(n= 50)	(n= 30)	(n= 80)
Preparation	54	37	48
Dose	8	0	5
Frequency	12	6	10
Duration	10	20	14
Administration of ORS	4	6	5
Indications for ORS	12	20	15
Other	0	10	4
10.DO YOU EVER RECOMMEND SALT SUGAR SOLUTION?	(n= 30)	(n= 30)	(n= 60)
Yes	33	93	68
11. HOW SHOULD A MOTHER MAKE IT?	(n= 10)	(n= 26)	(n= 36)
Correct recipe	0	26	14
Liter measure:			
glass	61	67	66
liter	25	23	20
other	14	14	14
12. DO YOU GIVE ANY ADVISE TO THE PARENTS ABOUT PREVENTION?	(n= 30)	(n= 30)	(n= 60)
Yes	100	100	100
13. WHAT SPECIFIC ADVISE TO YOU GIVE TO PARENTS ON HOW TO PREVENT DIARRHOEA.	(n= 30)	(n= 30)	(n= 60)
General	80	80	80
Water	33	20	27
Food	57	73	65
Handwashing	13	6	10
Breastfeeding	17	43	30
Latrines	3	20	12

ANNEX V.

DIARRHOEA KAP **KEY INFORMANT** IN-DEPTH INTERVIEW
(NWFP questionnaire focused on ORS, Balochistan on SSS)

DATE:______________________________INTERVIEWER:_____________________

NAME OF CAMP:_____________________DISTRICT:_________________________

HOW DID YOU FIND THE KEY INFORMANT:________________________________

____

PLACE OF INTERVIEW:____

AGE OF RESPONDENT:_______NO CHILDREN/GRANDCHILDREN:______/_______

PROVINCE OF ORIGIN:______________ETHNIC GROUP:____________________

1. Pashtun 2. Uzbeck
3. Tajik 4. Hazara

Is she a dai ? Yes[] No []

Introduction: We are working with the Afghan health programme. We would like to talk to you about diarrhoea as you have raised many children and have a lot of experience taking care of them. We are interested in understanding peoples beliefs about diarrhoea and therefore would like to ask you about these.

____

1. Are there many different kinds of diarrhoea? yes[ ] No[ ]

2. What are all the kinds of diarrhoea that you know about?
Is it hot or cold?

hot/cold	hot/cold

QUESTIONS/ANSWERS **EXTRA POINTS**

3. What causes this kind of diarrhoea?
4. Why does it (name the cause) cause diarrhoea?
5. How is this (name the kind) treated at home?
6. Why do you use this treatment?
7. Is this treatment a hot or cold treatment?

KIND________________

CAUSE____

WHY____

TREATMENT____

____

WHY TREATMENT USED____

____ HOT/COLD_____

KIND________________

CAUSE____

WHY____

TREATMENT____

____

WHY TREATMENT USED____

____ HOT/COLD_____

KIND________________

CAUSE____

WHY____

TREATMENT____

____

WHY TREATMENT USED____

____ HOT/COLD_____

QUESTIONS/ANSWERS

8. What other things can cause diarrhoea?
9. Why does it (name the cause) cause diarrhoea?
10. How is this (name the kind) treated at home?
11. Why do you use this treatment?
12. Is this treatment a hot or cold treatment?

EXTRA POINTS

*teething
*weather
*foods
*measles

CAUSE ________________

WHY ____

TREATMENT ____

____

WHY TREATMENT USED ____

________________________________ HOT/COLD ______

CAUSE ________________

WHY ____

TREATMENT ____

____

WHY TREATMENT USED ____

________________________________ HOT/COLD ______

CAUSE ________________

WHY ____

TREATMENT ____

____

WHY TREATMENT USED ____

________________________________ HOT/COLD ______

CAUSE ________________

WHY ____

TREATMENT ____

____

WHY TREATMENT USED ____

QUESTIONS/ANSWERS **EXTRA POINTS**

13. What happens to a child when they get diarrhoea?

____________________ ____________________

____________________ ____________________

____________________ ____________________

____________________ ____________________

14. Why does a child with diarrhoea become weak?

15. Why does a child become dry?

16. Why does a child not want to eat when he has diarrhoea?

17. Why does a child vomit?

18. Why do you think a child gets a fever?

19. Why do they sometimes have blood in their stools?

20. What causes a child to die from diarrhoea?

21. Should a child be given food during diarrhoea?
Yes[] No[]

22. If not why:____

____

____

____

23. If yes, why do some people not give food?__________

____

____

1. INTRODUCTION.

In 1990, the Project Director of Health (PDH) for Afghan refugees in Pakistan, introduced a Control of Diarrhoeal Disease (CDD) component to the Afghan refugee health programme of North West Frontier Province (NWFP), Pakistan. The aim of the CDD programme in 1991 was to reduce mortality by 20% and morbidity by 5% through improving diarrhoea case management both at home and in the 250 Basic Health Units (BHUs). The Project Directorates of Balochistan and the Punjab planned to introduce similar CDD programmes in 1991.

The 1991 plan of action included the development of CDD promotional materials for the programmes in NWFP, Balochistan and the Punjab. These materials will include posters of the prime messages, radio spots, leaflets and booklets targeted at the caretakers in diarrhoea home management.

These materials should be culturally acceptable. To obtain this ethno-medical information for the development of these materials, MSF-Holland (in collaboration with UNHCR and UNICEF) agreed to conduct a KAP (Knowledge, Attitude, Practice) study on diarrhoea among the Afghan refugee communities in NWFP and Balochistan.

The study consists of 3 components:

I. In-depth interviews.

Population: Grandmother/dais
Local Practitioners

Purpose: obtain qualitative data on Afghan "folk physiology" regarding diarrhoea and understand how providers outside the BHU system treat diarrhoea.

II. Focus groups discussions.

Population: Mothers
Community Health Workers (CHWs)
Female Health Workers (FHWs)

Purpose: obtain insights into the major problems faced in CDD programmes and ideas about solving them.

III. Surveys.

Population: Mothers
Fathers
BHU Caretakers

Purpose: obtain information about beliefs/practices of mothers, identify the role of men as fathers within the case management, understand actual diarrhoea case management among active diarrhoea cases.

QUESTIONS/ANSWERS **EXTRA POINTS**

24. If food given, what foods should be given?
25. What is the benefit of this food?
26. Do you consider this food a hot or cold food?

FOOD BENEFIT HOT/COLD

QUESTIONS/ANSWERS **EXTRA POINTS**

27. Are there some foods that never should be given? Yes[] No[]
28. What foods are these?
29. Why should they not be given?
30. Is this food a hot or cold food?

FOOD	WHY NOT GIVEN	HOT/COLD

QUESTIONS/ANSWERS **EXTRA POINTS**

31. Should a child be given drinks during diarrhoea?
 * includes water and breast milk Yes[] No[]

32. If yes, why do some people not give drinks?______

____

33. If not why:_____________________________________

____

____

34. What drinks should be given?
35. What is the benefit of this drink?
36. Is this drink a hot or cold drink?

DRINK	BENEFIT	HOT/COLD

QUESTIONS/ANSWERS **EXTRA POINTS**

37. Are there some drinks that should never be given? Yes[] No[]
38. What drinks are these? * hot or cold drinks
39. Why should they not be given?
40. Is this drink a hot or cold drink?

DRINK	WHY NOT GIVEN	HOT/COLD

QUESTIONS/ANSWERS **EXTRA POINTS**

41. Have ORS packets ever been used to treat a sick child with diarrhoea in your household?

42. If not why: ______________________________

____

____

43. What do you think of ORS packets?
    - * good things,why?/why do you use it
    - * problems/why would you not use it
        - -cost: expensive or cheap?
        - -available:easy or difficult to get?
        - -taste:child accept or not accept the taste?

____

____

____

____

____

____

44. How can diarrhoea be prevented?

____

____

____

ANNEX VIa.

HEALTH WORKER FOCUS GROUP DISCUSSION POINTS
(NWFP questionnaire focused on ORS, Balochistan on SSS)

INTRODUCTION OF TOPIC: We are working with Afghan health programmes for children about training families to use ORS packets. I would like to talk with you today about the families you are giving health education training to. Since you work with families and have the most knowledge about them, we feel you can give us good ideas on how to improve our training about ORS packets.

RULES

* We want each person to join in and speak
* Please talk only one at a time
* Discussion is welcome but only 2 people at a time so the others can listen
* It is OK not to agree with each other
* THIS IS NOT A TEST
* This will take no longer than 2 hours. We ask that you stay for the entire time.

QUESTIONS * PROBES

1. WHAT DO THE FAMILIES THAT YOU WORK WITH THINK OF ORS PACKETS?

    * good things

2. WHAT COMPLAINTS HAVE YOU HEARD ABOUT THE PACKETS FROM THEM?
    * complaints about cost?
    * complaints about it being not easy to get?
    * complaints that it does not stop diarrhoea?
    * complaints about the child not liking the taste or refusing to drink it?

3. WHY DO YOU THINK THAT SOME MOTHERS AFTER USING ORS ONCE DO NOT USE IT AGAIN?

    * does not stop diarrhoea
    * difficult to prepare
    * mothers prefer medicines
    * mothers think that it is just water
    * children refuse to drink it, why?

4. HOW DO YOU TEACH FAMILIES TO MAKE ORS? HOW MUCH WATER WITH HOW MUCH POWDER?

* Why?

(Show the Workers different containers and ask which one they use to measure water when they teach.)

* Why do they use this container?

5. HOW DO YOU SEE MOTHERS MAKING ORS IN THEIR HOMES?

* do they all make it correctly?
* what kind of mistakes do they make?
* do they have the same containers that you use to teach them?

6. WE HAVE FOUND THAT PEOPLE OFTEN USE DIFFERENT SIZES OF CONTAINERS TO MAKE ONE LITER. (Point to all the different glasses and cups, measure out what they hold) WHAT CAN WE DO ABOUT THIS?

* is there any container that is the **SAME SIZE** that every Afghan household has?
  - cups or glasses
  - teapots
  - yogurt containers

* is there anything that people use in a seer or kilo amount that can be used as a measure of a liter?
  - milk
  - oil
  - any other fluid

* who in your community would know how to measure a kilo/seer of water?

7. HOW CAN WE BEST MAKE ORS PACKETS POPULAR SO THAT EVERYONE KNOWS ABOUT IT AND WILL USE IT?

* what messages should we use
  - it is for rehydration?
  - it is for weakness?
  - it is to stop vomiting?

* how can we get the messages out
  - through radio, why, how
  - through doctor, why, how
  - through CHW/FHW, why, how
  - through mullahs, why, how
  - through posters, why, where

8. WHO SHOULD WE TELL ABOUT ORS TO?

- * father, why
- * mother, why
- * older sibling, why
- * grandmothers, why
- * mullahs, why

9. HOW CAN WE CONVINCE PEOPLE THAT DRUGS ARE DANGEROUS IN DIARRHOEA?

ANNEX VIb.

MOTHERS FOCUS GROUP DISCUSSION POINTS

(NWFP questionnaire focused on ORS, Balochistan on SSS)

INTRODUCTION OF TOPIC: We are working with Afghan health programmes on the problem of diarrhoea in children. I would like to talk with you today about ORS PACKETS. Since you are the ones to use the packets, we feel your opinions are the most valuable to help us improve our training programmes about using ORS packets.

RULES

* Do all of you have a child under age 5 and know about ORS packets?
* We want each person to join in and speak
* Please talk only one at a time
* Discussion is welcome but only 2 people at a time so the others can listen
* It is OK not to agree with each other
* THIS IS NOT A TEST
* This will take no longer than 1 hour. We ask that you stay for the entire time.

QUESTIONS * PROBES

1. HOW DO YOU MAKE ORS PACKETS?

* how much water, why
* how much powder, why

2. WHAT DO YOU THINK OF ORS PACKETS?

* good things,why?/why do you use it

* problems/why would you not use it
    - -cost: expensive or cheap?
    - -available:easy or difficult to get?
    - -effective:does it help diarrhoea or not?
    - -taste: children accept or not accept the taste?

3. DO YOU CONSIDER ORS PACKETS HOT OR COLD? WHY?

*Can this hotness or coldness be changed by the way it is made? How?

*Can ORS PACKETS be used for every kind of diarrhoea?
-hot diarrhoeas
-cold diarrhoeas
-other diarrhoeas (mucous, bloody, measles, from food)

4. A CHILD UNDER AGE 1 IS PASSING A FEW STOOLS IN THE MORNING, THEN IN THE AFTERNOON IT INCREASES AND BECOMES A LOT. HOW MUCH OF THE DRINK OF THE ORS PACKET SHOULD HE BE GIVEN?

*why
*what if the child refuses?

5. THE INSTRUCTIONS ON HOW MUCH DRINK OF THE ORS PACKET ARE SUPPOSED TO BE "GIVE ONE EXTRA CUP AFTER EACH LOOSE STOOL.
IS THIS POSSIBLE TO DO?

*do you have enough time in the day to do this?
*do you know every time when your child has passed a stool?
*what other instructions should we give to be sure the mother forces a lot of the drink?

Chapters 2 and 3 of this report describe the objectives of the study and the methodology; chapter 4 gives the results and chapter 5 makes some recommendations for CDD training.

When the survey started in February 1991, the number of officially registered Afghan refugees in NWFP was 2,210,178 and in Balochistan 804,779 (CAR).

ANNEX VII.

LOCAL PRACTITIONER PRACTICES

NO __	DOCTOR ______________________
DATE __/__/__	KIND ________________________
INTERVIEWER _________________	LOCATION ____________________

HISTORY ASKED: OTHER THINGS ASKED:

0. AGE <Y><N>
1. ONSET <Y><N>
2. STOOLS NUMBER <Y><N>
3. COLOR <Y><N>
4. BLOOD/MUCOUS <Y><N>
5. FEVER <Y><N>
6. VOMITING <Y><N>
7. ABDOMINAL PAIN <Y><N>
8. OTHER PROBLEM <Y><N>
9. URINE <Y><N>
10 TEARS <Y><N>
11.BEHAVIOR <Y><N>
12.APPETITE <Y><N>
13.DIET HISTORY <Y><N>
14.ILLNESS HISTORY <Y><N>
15.ALLERGIES TO MEDS <Y><N>

EXAMINATION DONE: OTHER THINGS EXAMINED:

16. WEIGHT <Y><N>
17. PULSE COUNT <Y><N>
18. BREATHING COUNT <Y><N>
    18.1 CHEST <Y><N>
19. TEMPERATURE <Y><N>
20. EYES (tears) <Y><N>
    20.1 ENT <Y><N>
21. MOUTH (moist) <Y><N>
    21.1 FONT <Y><N>
22. SKIN PINCH <Y><N>
23. ABDOMEN <Y><N>

LAB TESTS ORDERED: OTHER TESTS ORDERED:

24. STOOL EXAM <Y><N>

EDUCATION GIVEN:

OTHER HOME FLUIDS ADVISED:

25. HOME FLUIDS ADVISE <Y><N>
25.1 kind ________________

25.2 amount________________

25.3 how often____________

25.4 how long ____________

OTHER FOODS/AMOUNTS ADVISED:

26. FOODS ADVISED <Y><N>
26.1 kind ________________

26.2 amount________________

---

* ATTACH THE PRESPRIPTION HERE

27. MEDICINES ORDERED <Y><N>
27.1 states the name <Y><N>

27.2 explains dose <Y><N>

27.3 explains how often to give <Y><N>

27.4 explains how many days to give <Y><N>

---

*PLEASE WRITE DETAILS

28. ORS ORDERED <Y><N>
28.1 explains how to mix <Y><N>____

28.2 explains dose <Y><N>____

28.3 explains how often to give <Y><N>____________________________________

28.4 explains how many days to give <Y><N>________________________________

OTHER PREVENTION EXPLAINED:

29. PREVENTION EXPLAINED <Y><N>
    29.1 breast feeding <Y><N>
    29.2 food protection <Y><N>
    29.3 handwashing with soap <Y><N>
    29.4 use of latrines <Y><N>
    29.5 water protection <Y><N>
    29.6 other________________________________

30. NOTES:____________________________________

31. Only_ORS <Y><N>
32. ORS <Y><N>
33. Pectin <Y><N>
34. Antidi________________
35. Anitspas________________
36. Amoeb1________________
37. Amoeb2________________
38. Antibio1________________
39. Antibio2________________
40. Antibio3________________

ANNEX VIII.

CAMPS SELECTED FOR THE DIARRHOEAL SURVEY

	NORTH WEST FRONTIER PROVINCE		BALOCHISTAN	
	DISTRICT	CAMP	DISTRICT	CAMP
1.	Abbottabad	Panian-2	Muslim Bagh	Malgagai-1
2.		Bossu Mera-1		Malgagai-3
3.	Bannu	Saidgi	Chaman	Maku Kach
4.	Bajaur	Damadola-6	Gulistan	New Saranan-3
5.		Rashaki-2		Saranan-1
6.		Yousafabad-3		Saranan-2
7.	D.I.Khan	Girsal		Piralezai-2
8.	Kohat	Oblan		Piralezai-3
9.		Kotki		Piralezai-4
10.		Dersamand-1		Piralezai-5
11.	Chitral	Nagar		Noruk
12.	Dir	Chakdara	Loralai	Katwai
13.	Kurram	Old Bagzai		Zar Karez-1
14.		Khapyanga-4		Ghazgai Wal/Tak
15.		Gawaki	Chagai	Ghagai
16.		Parachinar-2		Lijee Karez
17.		New Bagzai-1		Pishook
18.	Malakand	Palai-2		Posti
19.	Mardan	Fazal-1		Girdi Jungle
20.	Manshera	Ichirian		Amin Abad
21.	Swat	Koga-1		Umer Shah
22.	N. Waziristan	Darpakhel-1	Pishin	Killa Haji Khan
23.		Qutub Khel		Surkhab-1
24.		Tabbi		Surkhab-2
25.	S. Waziristan	Zarinoor-1		Surkhab-3
26.	Peshawar-1	Munda-4		Surkhab-4
27.		Kacha Garhi-1		Surkhab-5
28.		Michni	Quetta	Moh'd Khel-2
29.		Kababian-1		Moh'd Khel-3
30.	Peshawar-2	Mera Kacheri-3		Moh'd Khel-4
31.		Jalozai-1		
32.		Hawai-4		

2. OBJECTIVES OF THE STUDY.

General objectives.

To develop guidelines on the promotion of diarrhoea home management and oral rehydration solution (ORS) appropriate to the Afghan refugees in NWFP and Balochistan.

Specific objectives.

* Identify CDD targets outside of the mother and the training priorities of these groups.

* Determine traditional Afghan folk physiology beliefs as related to perceived causes of diarrhoea and treatment rationales used in childhood diarrhoea for the design of primary messages which Afghan families can better comprehend and likewise act upon.

* Identify common household fluid and dietary regimes used during diarrhoea case management and to determine any fluid and food taboos.

* Investigate Afghan ORS practices and barriers to use.

* Understand the practices of local providers that Afghans consult in order to identify CDD training priorities for this group.

* Evaluate the impact of CDD training to date in order to suggest areas that need more attention, and to recommend further studies.

3. METHODOLOGY.

Surveys.

The sampling frame consists of the registered Afghan refugees in NWFP and Balochistan. At the time of the survey the NWFP refugee population was believed to be approximately 2.210.178 and the Balochistan refugee population was approximately 804.779 (CAR). CAR provided a list of the refugee camps containing the total population and the numbers of families. These data were used to select the sample.

The standard cluster sampling methodology adapted by World Health Organization (WHO) for the Extended Programme on Immunization (EPI) was used to select the clusters for the mothers and fathers survey [WHO].

As the first step, clusters are randomly drawn in proportion to their population size. In NWFP 32 clusters were chosen, in Balochistan 30. 32 clusters were selected in NWFP to assure an adequate sample size in case there should be access problems in tribal areas.

The second step involves selecting one household at random per cluster as a starting point, and then visiting house-to-house until seven mothers are located. She must have a child under 5 years of age who suffered from diarrhoea in the two weeks before the visiting date of the survey team. Seven fathers who have a child under 5 years of age per cluster were also interviewed. When a mother and a father were selected from the same compound, they were interviewed in such a way that they could not hear each other's answers.

One BHU Caretaker was selected from the Basic Health Unit (BHU) operating in the selected camps. The caretaker must be a person who has a child under 5 years of age suffering from diarrhoea for whom she/he wanted to consult the doctor. The procedure to select a caretaker was performed in the following manner. From the entrance of the BHU, the interviewer had to start with the first person situated at the extreme left side. If this person was not suitable for the survey according to the above mentioned criteria, the next person was chosen. This procedure had to be followed until a suitable caretaker was found. In each cluster 1 caretaker was selected.

In-depth interviews.

Key-informants were selected in such a way that in NWFP 4 Tajik and 4 Pashtun were interviewed. In Balochistan 4 Hazara and 4 Uzbeck were interviewed. The key-informants were grandmothers, either selected by the team-members or through leaders. They were to be well known in their community as wise and experienced in treating such illnesses as diarrhoea.

One local practitioner (outside of the Afghan refugee BHU system) was selected from each sampled camp. This was done as follows. The mothers questionnaire asked the mother if she had visited a local practitioner for her child with diarrhoea. The local practitioner mentioned by the first woman visited was the one selected for an interview. If the person was not available, the second local practitioner mentioned was chosen. This procedure continued until a practitioner was found.